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ABSTRACT

For use in planning and conducting functional multi-phase driver education programs, this teacher's guide consists of four phases of instruction: classroom activities, simulated application, in-car range practice, and in-car public practice. Contents are divided into three instructional sections, with the first combining the classroom activities and simulated applications phases into one 11-unit instructional phase covering: (1) orientation and pretesting, (2) driving procedures and skills, (3) laws and regulations, (4) personal factors influencing driving, (5) driving hazards, (6) defensive and emergency driving procedures, (7) highway and expressway driving, (8) engineering and ownership, (9) accidents, (10) traffic safety programs, and (11) review, posttesting, advanced skills, and individual practice. Each unit gives purpose, competencies to be developed, and instructional outline including the day and teaching station, content area and activities, and references. The second instructional section covers range practice patterns, providing written instructions and detailed diagrams of procedures to be followed in the driving laboratory. The public practice phase provides a driving schedule including various traffic environments, to be used in conjunction with the other instructional phases. This guide was developed with funds provided under the Title III of the Elementary and Secondary Education Act. (AW)

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Multi - Phase Driver Education Teaching Guide

HURST-EULESS-BEDFORD INDEPENDENT SCHOOL DISTRICT

Hurst, Texas

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MULTI-PHASE DRIVER EDUCATION

TEACHING GUIDE

HURST - EULESS - BEDFORD

INDEPENDENT SCHOOL DISTRICT

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Superintendent of Schools
Newell H. Odell

FOREWORD

This guide has been developed to assist teachers in conducting a functional multi-phase Driver Education Program.

The successful user of the guide will without doubt alter the instructional format in some instances. Strict compliance to the guide is not expected, nor is habitual, extensive diversion.

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SECTION I - INTRODUCTION

A. PHILOSOPHY

The Board of Education of the Hurst-Euless-Bedford Independent School District believes Driver Education to be within the responsibilities of the local system. In addition, it is felt that instruction can best be carried out primarily within the regular school day session.

It is further believed that in the teaching of Driver Education, emphasis should be placed on the development of desirable behavior patterns, to be executed while driving an automobile. Skills required to execute maneuvers are of secondary importance. The manner and frame of mind with which maneuvers are made reflects attitude and behaviors.

It is through a blended, multi-phase instructional program that desirable behavioral patterns can best be developed. It is toward such an end that our Driver Education program is designed and conducted.

B. PROGRAM OBJECTIVES

The objectives of this program are to assist all students in the development of:

- desirable and responsible attitudes and behavioral patterns which will be exhibited in the traffic society at all times
- knowledge commensurate with the demands of the many facets of driver and traffic safety
- fundamental driving skills necessary for safe and successful performance on streets, highways, and expressways
- abilities to perceive and make sound judgments in normal and emergency traffic situations
- an everlasting appreciation and respect for our traffic society, including agencies for the protection of that society.

C. OVERVIEW OF THE TOTAL PROGRAM

1. General Information

The standards for Driver and Traffic Safety Education as set forth by the Texas Education Agency are in no way slighted in this program. Rather, they are always met and sometimes surpassed. The directions to the district superintendent and the school principal are not restated here because they are sufficient as they now stand.

2. The Instructor

The attainment of any educational objective rests to a great extent upon the person or persons charged with the responsibility of instruction. This being the case, in Driver and Traffic Safety Education the instructor must be willing to accept the following responsibilities:

- Be knowledgable of instructional plans through pre-service and in-service preparation and growth

- Be sincere and believe in the merits of a strong instructional program in this area

- Maintain a good personal driving record and display appropriate driving behavior at all times

- Cooperate with colleagues, administrators, law enforcement officials, and others in upgrading and maintaining a sound program. This includes involvement in several types of evaluation.

- Maintain professional standing in local, state, and national organizations connected with this field.

3. The Student

Students must meet certain requirements and accept certain responsibilities upon entering the program. The student must:

- Be fifteen years of age or older before the first day of instruction. Proof of this may be required by the principal and/or the class instructor.
- Secure permission of parent or guardian prior to the first day of instruction on a form supplied by the school
- Accept the responsibility of securing a beginner permit before enrolling in the course
- Exhibit proper behavior and abide by rules and regulations established by the school or other recognized agencies
- Accept the idea that the responsibility of obtaining an operator's license is his/her's and not the school's
- Realize that other requirements established by local school authorities for all curricular areas will apply to Driver and Traffic Safety Education

4. Instructional Phases

This is a four-phase program consisting of instruction through classroom activities, simulated application, in-car range practice, and in-car public practice. Following is a short description of each phase of the program:

- Classroom activities--includes instruction covering various content areas such as laws and regulations, characteristics of drivers, engineering and ownership of roadways and automobiles, psychophysical factors affecting driving, driving skills, analysis of traffic accidents, and programs promoting safety. Methods and techniques of instruction may vary, but classroom instruction may simply be thought of as taking place within a classroom.

- Simulated application--is a teaching method which places the learner in a simulated environment. Through the use of films and electromechanical devices designed to represent the driver's compartment of an automobile, the student experiences many traffic situations, responds to these situations, and is immediately aware of any errors in response.

- In-car range practice--is experienced in an off-street area. Several cars are used simultaneously to provide controlled laboratory experience for the students under the supervision of a certified instructor. The range consists of adequate space for carrying out various driving maneuvers; one-way, two-way, and multi-lane traffic; intersections, curves, signals, signs, and lane markings; and a workable method of communication between teacher and students.

- In-car public practice--is conducted on public streets and highways in an automobile equipped with dual brakes. One student drives with the teacher in the front seat and usually two or three other students in the back seat. The students in the back seat are there for observation purposes and should be engaged in a critical, non-verbal analysis of the driver's actions. This phase of the program is conducted during out-of-school hours.

5. Evaluation

The degree of success of the program will be ascertained through planned evaluation procedures. The evaluation process is actually three fold--student evaluation, organization evaluation, and longitudinal program evaluation.

- Pupil evaluation--may be considered as the process for determining what the student has learned from the course, these are immediate outcomes. Evaluation in this realm is directed at:
  - knowledge of cars, drivers, laws, highways, and desirable driving procedures in various traffic situations

  - psychophysical functions such as reaction time, vision tests, perceiving and making judgments, and responding to various situations with speed and accuracy

  - manipulative skills such as starting, stopping, turning, parking, passing, and backing

  - attitude alterations in regard to the traffic society

- Organization evaluation--refers to the evaluation of the design and operation of the program in light of suggested policies and practices. Meeting certain standards does not guarantee success for a program but it does increase the probabil of success. Evaluation in this realm is directed at:
  - organization of course content into sequential units and experiences

  - records--forms and practices

  - time allocation for each unit or topic

  - facilities--amount, location, utilization, and maintenance

  - instructional staff--training and preparation, continued professional growth, maintenance of professional standing in organizations concerned with safety

  - instructional activities and methods are selected because of their contribution to the betterment of the program.

  - evaluation procedures and forms are valid, reliable, and feasible.

- Longitudinal program evaluation--is necessary in order to determine the worth or effectiveness of the program. This is more long-range in nature than student or organization evaluation. Evaluation in this realm is directed at:

  - opinions of teachers, administrators, former students, parents of former students, police officials, traffic judges, and others as to the subjective value of the program.

- program investigations and subsequent reports of national, state, and local educational agencies or organizations

- analysis of former students' driving records in comparison with national and state figures.

SECTION II - INSTRUCTIONAL CONTENT FOR BLENDED PHASES

II. INSTRUCTIONAL CONTENT

A. UNIT I - ORIENTATION AND PRE-TESTING (6 days)

Purpose

The purpose of this unit is to orientate the students to the total and segmented aspects of the driver education program. Pre-testing activities will also be conducted during this unit.

Competencies

At the completion of this unit the students should have knowledge of the program in general. They should exhibit a serious attitude toward the program, and should be cognizant of the reasons for the testing program.

Unit Instructional Outline

1. Orientation Points
    - a. overall program
    - b. pupil and teacher responsibilities
    - c. four-phases
    - d. testing program

2. Pre-Testing
    - a. Phychological tests
        - 1. attitude
        - 2. driving knowledge
    - b. Psychophysical tests
        - 1. complex reaction
        - 2. distance judgment
        - 3. visual acuity
        - 4. night vision
        - 5. field of vision

Instructional Sequence

Day & Teaching Station	Content Areas & Activities	Reference
1 - Classroom	Area - Orientation Activity - Orientation to overall program - Discuss pupil & teacher responsibilities - Discuss each of the four phases of the program with emphasis on on-street driving phase	Introductory section of the guide
2 - Classroom	Area - Orientation Activity - Special orientations to testing program. Describe each test giving method and purpose for each	American Automobile Association Instructors' Manual for Driver Tests
3 - Classroom	Area - Psychological Testing Activity - Administer attitude test - Administer driving knowledge test by American Automobile Association	AAA Instructors Manual for Driver Tests
4 - Classroom	Area - Psychophysical Testing Activity - Administer complex reaction test - Administer distance judgment test - Administer visual acuity test - Administer night vision tests - Administer field of vision test	AAA Instructor Manual for Driver Tests

Day & Teaching Station	Content Areas & Activities	Reference
5 - Classroom	Area - Psychophysical Testing Activity - Administer complex reaction test - Administer distance judgmett test - Administer visual acuity test - Administer night vision test - Administer field of vision test	AAA Instructors' Manual for Driver Tests
6 - Classroom	Area - Psychophysical Testing Activity - Administer complex reaction test - Administer distance judgment test - Administer visual acuity test - Administer night vision test - Administer field of vision test Note: Three days are set aside for these five tests. This should provide ample time for testing and recording scores for 24 students per class. Instruction on method of testing should be made clear to enhance speed and validity of testing.	AAA Instructors' Manual for Driver Tests

B. UNIT II - DRIVING PROCEDURES AND SKILLS (12 days)

Purpose

The purpose of this unit is to acquaint the students with the initial procedures and skills needed to effectively operate an automobile.

Competencies

1. Knows the name, function, and general location of all instrument panel switches
2. Routinely and effectively conducts proper compartment check, before starting the engine
3. Follows the correct procedure in starting the engine, selecting the proper gear, releasing the brake, and putting the car in motion
4. Knows correct procedure for executing fundamental driving maneuvers and displays a fair degree of skill in making these maneuvers
5. Displays knowledge, self-control, and control of the automobile while driving on the range

Unit Instructional Outline

In order to help the student achieve the competencies stated above, the teacher should give consideration to the following points:

1. Preparation for action
    a. Compartment check
    b. Starting
    c. Selection of proper gear
    d. Release of brakes

2. Driving maneuvers and skills
    a. Acceleration and deceleration
    b. Steering
    c. Signaling
    d. Turning
    e. Following
    f. Passing

g. Parking
h. Stopping (include stopping distance under normal conditions)
i. Backing
j. Turning car around

[illegible] Driving in the city
a. Residential areas
b. In traffic
c. Cooperation

Instructional Sequence

Day & Teaching Station	Content Areas & Activities	Reference
7 - Classroom	Area - Preparing for action Activity - Discuss preparation for any undertaking - Explain flow chart - Have students develop flow chart for simple act - Have student develop flow chart for putting a car in motion - Discuss charts and point out oversights	Sportsmanlike Driving, Fifth Edition, pp. 288-300
8 - Simulator	Area- Orientation to simulator Activity - Film #1 - "Introductory Film"	Allstate Teachers' Manua
9 - Range	Area - Orientation to range - Preparing for action Activity - Give student range rules - Discuss rules - Give reasons for rules - Range pattern #1	Range pattern section of this guide Page 42.
10 - Classroom	Area - Basic Maneuvers Activity - Discuss acceleration and deceleration, steering, signaling, and right and left turns - Show filmstrip "Left Turns" 16 minutes - Show filmstrip "Right Turns " - 16 minutes	S. D. pp.318-338, 155-165 Ford - Intersection Series

Day & Teaching Station	Content Areas & Activities	Reference
11 - Simulator	Area - Preparation and Action Activity - Film #2 "Start of Good Driving"	Allstate Teachers' Manual
12 - Range	Area - Good Starting Procedure Activity - Range pattern #2	Range patterns section of this guide Page 46.
13 - Classroom	Area - Basic Maneuvers Activity - Discuss following, passing, parking, stopping, backing, and turning the car around - Make flow chart on driving around one city block - Discuss flow charts, with students analyzing them	S.D.,pp.155-165 192-193, 84-85, 318, 338, 143-146
14 - Simulator	Area - Basic Maneuvers Activity - Film #3 "The Good Turn"	Allstate Teachers' Manual
15 - Range	Area - Basic Maneuevers - Beginning Turns Activity - Range Pattern #3	Range Patterns section of this guide Page 48.
16 - Classroom	Area - Driving in the city Activity - Discuss factors of speed, pedestrians, bicycles, children at play, street construction, schools, churches, recreation areas, traffic flow, and cooperation	S.D., pp.155-182
17 - Simulator	Area - Driving in the city Activity - Film #4 - "City Driving"	Allstate Teachers' Manua
18 - Range	Area - Driving in the City Activity - Range Pattern #4	Range Pattern section of this guide. Page 50.

C. UNIT III - LAWS AND REGULATIONS (9 days)

Purpose

The purpose of this unit is to acquaint the students with traffic laws and regulations in Texas. Attainment of the following competencies should be expected.

Competencies

1. Knows the laws and regulations governing the operation of motor vehicles on streets, highways, and expressways in the state of Texas
2. Understands, appreciates, and abides by all traffic laws as set forth by governmental agencies
3. Knows the meaning of traffic signs, signals, and markings, and abides by them
4. Knows and understands the responsibility law in case of accidents
5. Knows laws governing driver's licenses, certificate and titles, registration, and vehicular inspection
6. Understands and appreciates the role of traffic law enforcement agencies and personnel in our society.

Unit Instructional Outline

Instruction in this unit should be given according to the following outline or subject areas if the stated objectives are to be attained.

1. Need for and enforcement of traffic laws
    a. laws made by
    b. uniform traffic code
2. Laws in the traffic environment
    a. right of way laws
    b. speed limits
    c. emergency stops
    d. towing of other vehicles
    e. school buses
    f. overtaking and passing
    g. emergency vehicles
    h. drinking while driving
    i. signaling
    j. making turns

- k. turning vehicle around
- l. traffic signs, signals, and markings

3. Responsibility Laws
   - a. in case of accidents
   - b. financial responsibility

4. Ownership and operation laws
   - a. driver's licenses
   - b. certificate of title
   - c. registration

Instructional Sequence

Day & Teaching Station	Content Areas & Activities	Reference
19 - Classroom	Area - Need for and enforcement of traffic laws Activity - Discuss the need for laws in various areas of life concluding with the need for traffic laws - Discuss who makes the laws - Present some recommendations on a uniform traffic code and have student discuss advantages and disadvantages - Point out the need for enforcement of traffic laws. Build understanding and respect of law enforcement by taking a positive approach. - Discuss the use of radar to check speed of cars - Have highway patrolman visit class and discuss responsibilities of that organization. Local police chiefs should also be asked to speak to class.	S.D. pp. 105-107
20 - Simulator	Area - Laws in the traffic environment - Right of way laws - Speed Limits - Traffic control devices Activity - Filmstrip, "Right of Way" 16 minutes - Discuss right of way laws.	S.D. pp. 108-112 Texas Drive Handbook, pp.40-45, 33,29,66,36 19-27,77,37 79-80,9,16-18

	Present situations and have pupils decide who had right-of-way - Discuss reasons for speed limits and how they vary - Teach recognition of signs by shape	Ford - Intersection series
21 - Range	Area - Laws in the traffic environment Activity - Range Pattern #5	Range Pattern section of this guide Page 54.
22 - Classroom	Area - Laws in the traffic environment Towing of vehicles School buses Overtaking & passing Emergency vehicles Activity - Discuss laws in each of the areas above. Locate specific laws - Have student write or discuss the reasons for each law - Have a group of students make a study of the most frequent traffic law violations in the city. Secure factual numbers from the police department. Discuss methods of curbing violations with the police officials and in class	S.D. pp.162-163, 172-178, 109 Texas Driver's Handbook, pp. 34-36, 58-59, 30-32, 43
23 - Simulator	Area - Laws in the traffic environment Drinking while driving Making right & left turns Turning vehicle around Emergency stops Activity - Discuss law pertaining to above items - Demonstrate with chalk, flannel, or magnetic board when appropriate - Have students develop hypothetical situation and discuss the situation with class	S.D., pp.91-93, 192-194, 325-327. T.D.H., pp.15, 47-48, 37-40, 78, 9

Day & Teaching Station	Content Areas & Activities	References
24 - Range	Area - Laws in the traffic environment Activity - Range pattern #6	Range Pattern section of this guide. Page 57.
25 - Classroom	Area - Responsibility laws In case of accidents Financial Responsibility Activity - Discuss reasons for laws - Construct hypothetical situations and have students write or explain lawful procedures - Determine number of vehicles being operated without liability insurance through police department or insurance agencies if possible - Have traffic court judge speak to class on this and other topics in relation to laws and consequences of violations	S.D., pp.113-115, 249-251 T.D.H., pp.54-57
26 - Simulator	Area - Ownership & operation laws Driver's license Certificate of title Registration Vehicular inspection Activity - Discuss purpose for requiring a valid driver's license - Discuss obtaining, expiration, suspension, and revocation of driver's license - Discuss reasons for requiring titles, registrations, and inspections of vehicles	S.D., pp.34, 128-129, 116-118, 340-341 T.D.H., 6-11, 27, 69-71, 14-16, 4
27 - Range	Area - Laws & regulations Vehicle Inspection Activity- Range Pattern #7	Range Pattern section of this guide Page 59.

D. UNIT IV - PERSONAL FACTORS INFLUENCING DRIVING (9 days)

Purpose

The purpose of this unit is to provide learning experience through which the students may gain knowledge and understanding of personal factors which affect driving ability. The following competencies should be attained.

Competencies

1. Understands that mental awareness, emotions, and attitudes toward observances of the law influence, to no small degree, safe driving

2. Displays mental awareness, stable emotions, and desirable attitudes in driving behavior

3. Understands that certain physical factors influence driving, and makes needed adjustments to compensate for physical factors creating hazards during the driving process

4. Understands that various psychophysical factors influence driving behavior, and is especially aware of personal psychophysical limitations

5. Knows how and adjusts individual driving behavior in light of personal psychophysical limitations

Unit Instructional Outline

In order to assure success in attaining the stated competencies, instruction in this unit should be related to the following content areas.

1. Psychological Factors
    a. mental awareness
    b. emotions
    c. attitudes toward driving

2. Physical Factors
    a. disabilities
    b. physical fitness

3. Psychophysical Factors

  1. acuity
  2. depth perception
  3. color perception
  4. field of vision
  5. night vision
  6. vision under adverse circumstances

b. reaction time
  1. simple
  2. complex

Instructional Sequence

Day & Teaching Station	Content Areas & Activities	Reference
28 - Classroom	Area - Psychological Factors Mental awareness Emotions Activity - Stress mental awareness by asking each person to write down a description of what the person in back of them is wearing, without looking - Discuss the importance of being aware of your environment and how this relates to driving - Discuss various emotions, such as anger, fear, etc., and point out how these emotions may promote unsafe driving actions if they are not controlled	S.D., pp.19-3
29 - Simulator	Area - Psychological Factors Attitude toward law observance Attitude toward other drivers Activity - Discuss observance of the law. Include emphasis on individual responsibility in all situations - Emphasize cooperation with other drivers, especially in congested traffic situations	S.D., pp. 145, 164, 181, 187, 31-37

Day & Teaching Station	Content Areas & Activities	Reference
30 - Range	Area - Psychological Factors Activity - Range Pattern #8	Range Pattern section of this guide Page 61.
31 - Classroom	Area - Physical Factors Activity - Discuss various physical disabilities and point out how they influence driving - Have students propose various ways of compensating for physical disabilities - Discuss the relationship of physical fitness to safe driving	S.D., pp.54-64, T.D.H., p.50
32 - Simulator	Area - Physical Factors Activity - Show Filmstrip -"Seeing Habits for Expert Driving" 22 minutes - Discussion of how physical condition can affect seeing habits such as being tired, having fever, etc. - Film #9 "In Reverse"	Ford - "Seeing Habits for Expert Driving" Allstate Teachers' Manual
33 - Range	Area - Physical Factors Activity - Range Pattern #9	Range Pattern section of this guide Page 65.
34 - Classroom	Area - Psychophysical Factors Vision Reaction time Activity - Discuss the importance of vision, in all its aspects, for safe driving. Include all areas in content outline for this unit.	S.D.,pp.38-53 T.D.H. p. 6

	- Explain difference between simple & complex reaction - Discuss relationship between vision, and reaction time	
35 - Simulator	Area - Psychophysical Factors Activity - Film #5 "Advanced City Driving" - Film #10 "Parking" - Discuss the relationship of various psychophysical factors to driving in the city	Allstate Teachers' Manual
36 - Range	Area - Psychophysical Factors Activity - Range Pattern #10	Range Pattern section of this guide Page 67.

E. UNIT V - HAZARDS TO SAFE DRIVING (6 days)

Purpose

The purpose of this unit is to acquaint the student with hazards to safe driving. Methods to avoid, control, or otherwise prevent accidents in regard to these hazards should also be presented. Students should possess the following competencies at the conclusion of this unit:

Competencies

1. Know the danger of conditions created by various climatic conditions and adjusts driving behavior to compensate for those hazards.

2. Adjusts speed and otherwise follows direction of signs and signals when driving near construction sites.

3. Knows the affects of physical laws on the movement of a vehicle and varies driving behavior to compensate for these laws.

4. Understands the influence of alcohol and drugs on driving performance.

5. Knows the factors which contribute to driver fatigue, as well as the influence of fatigue on driving performance. Furthermore, the student knows and follows accepted methods for combating driver fatigue.

6. Understands the additional hazards created by night driving and adjusts driving procedure in regard to these hazards.

Unit Instructional Outline

To insure adequate coverage of subject matter in this unit, instruction should be organized around the following content areas.

1. Inclimate weather
2. Construction sights
3. Physical laws
4. Alcohol and drugs
5. Fatigue
6. Driving at night

Instructional Sequence

Day & Teaching Station	Content Areas & Activities	Reference
37 - Classroom	Area - Inclimate weather Construction sites Physical laws Activity - Discuss various types of inclimate weather; such as rain, sleet, snow, etc. - Point out the necessity of obeying all signs in construction areas - Define physical laws influencing driving and set up experiments where possible to demonstrate these laws	S.D., pp.78-89, 196-215
38 - Simulator	Area - Physical laws Alcohol & drugs Fatigue Activity - Continue discussion and demonstration on physical laws - Discuss the effects of alcohol & drugs on driving performance - Discuss causes and effects of driver fatigue and desirable methods for combating fatigue	S.D., pp.78-89
39 - Range	Area - Physical Laws Activity - Range Pattern #11	Range Pattern section of this guide Page 70.
40 - Classroom	Area - Alcohol and Drugs Driving at night Activity - Continue discussion on effects of alcohol and drugs on driving performance - Discuss additional hazards encountered when driving at night	

Day & Teaching Station	Content Areas & Activities	Reference
41 - Simulator	Area - Driving at night Activity - Film #11 "Driving After Dark" - Discuss use of high and low beams and courtesy to other drivers	Allstate Teachers' Manual
42 - Range	Area - Hazards to safe driving Activity - Range Pattern #12	Range Pattern section of this guide Page 71.

F. UNIT VI - DEFENSIVE AND EMERGENCY DRIVING PROCEDURES (9 days)

Purpose

The purpose of this unit is to promote the development of desirable defensive driving procedures, as well as equipping the student with knowledge of what to do should an emergency situation arise. The students should possess the following competencies at the conclusion of this unit.

Competencies

1. Knows clues to use in defensive driving in urban and rural traffic
2. Applies good defensive driving rules when operating in urban or rural traffic
3. Realizes that emergency situations may arise in spite of good defensive driving procedures
4. Knows the proper action to take in case of the occurrence of various emergency situations
5. Follows the suggested procedure of action when an emergency occurs.

Unit Instructional Outline

Instruction in this unit should be centered around the following content areas.

1. Defensive Driving
    a. Urban traffic
    b. Rural traffic

2. Emergency Maneuvers
    a. skidding
    b. running off the road
    c. sudden obstructions of vision
    d. emergency braking
    e. blow outs

Instructional Sequence

Day & Teaching Station	Content Area & Activities	Reference
43 - Classroom	Area - Defensive Driving - Urban Traffic pedestrians bicycles children at play following too close urban traffic	S.D. pp.166-182
	Activity - Point out clues to look for while driving in the city - Make particular reference here to pedestrians, bicycles, children at play, and following too closely	National Safet Council - Stop Accidents Right Smack in Front of You
	- Film "Emergencies In The Making"	AAA
	- Filmstrip "Urban and Surburban"	Shell
44 - Simulator	Area - Defensive Driving - Urban Traffic Parked cars Blind corners Other obstructions	S.D. pp.155-165
	Activity - Filmstrip "Protecting Your Margin of Safety" 14 minutes	Ford-Emergency Maneuvers
	- Filmstrip "Being Passed" No record	Ford-Passing series
45 - Range	Area - Defensive Driving -Urban Traffic Activity - Range Pattern #13	Range Pattern section of this guide Page 73.
46 - Classroom	Area - Defensive Driving - Rural Traffic Ranging livestock Horseback riders Activity - Discuss the need for defensive driving, even though another vehicle may not be in sight	Here the teacher and students will need to make more use of their imagination, as the text does not cover such material

	- Filmstrip "Hazards on Road" - no record - Filmstrip "Highways and Byways" - Discuss rules of courtesy with respect to horseback riders - Point out other defensive driving practices to be followed while driving in rural traffic. Such as slow moving trucks, tractors, and other farm machinery - Driving with consideration of the foliage alongside the road, should be covered here. For example, a culvert hidden by tall grass or weeds	Ford-Passing series Shell
47 - Simulator	Area - Defensive Driving - Rural Traffic Activity - Filmstrip "Basic Intersection Maneuvers" 16 minutes - Filmstrip "Through Signal" 16 Minutes	Ford-Intersection series Ford-Intersection series
48 - Range	Area - Defensive Driving - Rural Traffic Activity - Range Pattern #14	Range Pattern section of this guide Page 75
49 - Classroom	Area - Emergency Procedures Skidding Running Off the road Loss of vision Emergency braking Blow outs Activity - Make the point that by practicing good defensive driving procedures one can avoid many emergency situations. However, when an emergency does arise one must know how to control himself and the vehicle - Correct actions in regard to each of the sub-areas stated above should be considered.	S.D., pp.14-15, 151, 146-147, 198-204, 209-21 214, 151-153, 85, 149, 199 T.D.H. p.48

Day & Teaching Station	Content Area & Activities	Reference
50 - Simulator	Area - Emergency Procedures Activity - Filmstrip "Controlling Skids" - 16 minutes - Filmstrip "Wheels Off Road" - 7 minutes - Filmstrip "Sudden Loss of Vision"-7 minutes - Filmstrip "Emergency Braking Skills"- 7 min.	Ford - Emergency Maneuvers Ford - Emergency Maneuvers Ford - Emergency Maneuvers Ford - Emergency Maneuvers
51 - Range	Area - Emergency Procedures Activity - Range Pattern #15	Range Pattern section of this guide Page 76.

G. UNIT VII - DRIVING ON HIGHWAYS & EXPRESSWAYS (9 days)

Purpose

The purpose of this unit is to acquaint the students with proper driving procedures on highways and expressways. At the conclusion the students should possess the following competencies.

Competencies

1. Knows and practices good driving procedures on highways, especially when passing or being passed.

2. Knows how and properly uses the acceleration lane when entering the expressway.

3. Knows and exhibits proper driving procedure on the expressways, especially in regard to lane position and change

4. Knows how and properly uses the deceleration lane when leaving the expressway

5. Knows various expressway designs, particularly in regard to interchanges

6. Can and does use road maps in planning a route to be followed on a trip. Also, knows how to use road maps for securing various types of information.

Unit Instructional Outline

In order to promote the attainment of the previously stated student competencies, instruction in this unit should be concerned wich the following content areas.

1. Highway Driving

2. Expressway Driving
   a. entering the expressway
   b. driving on the expressway
   c. leaving the expressway
   d. expressway designs
   e. reading road maps

Instructional Sequence

Day & Teaching Station	Content Area & Activities	Reference
52 - Classroom	Area - Highway Driving Activity - Filmstrip "Oncoming Traffic" - Filmstrip "Basic Passing" - Discuss highway driving on a two lane hard surface. Emphasize awareness of shoulders, type, condition, etc., as well as traffic.	S.D., pp.270-271, 136-154 Ford - Passing series Ford - Passing series
53 - Simulator	Area - Highway Driving Activity - Film #6 "Highway Driving"-26 minutes	Allstate Teachers' manual
54 - Range	Area - Highway Driving Activity - Range Pattern #16	Range Pattern section of this guide Page 77.
55 - Classroom	Area - Expressways Introduction Entering the Expressway Activity - Film "Freeway Driving is Different" - Filmstrip "Entering the Freeway" - 16 min. - Emphasize use of acceleration lane	S.D., pp. 183-195 A.A.A. Ford - Freeway Maneuvers
56 - Simulator	Area - Expressways Introduction Entering the Expressway Activity - Film #7 "Expressways are Different"	Allstate Teachers' manual
57 - Range	Area - Expressways Entering Activity - Range Pattern #17	Range Pattern section of this guide Page 79.

Day & Teaching Station	Content Area & Activities	Reference
58 - Classroom	Area - Expressways Driving on Expressways Activity - Filmstrip "Driving at Freeway Speeds"- 16 min. - Filmstrip "Passing on the Freeway" - 16 minutes - Emphasize thinking ahead for proper lane position - Study the use of road maps in planning routes to be followed and obtaining other information, such as type of road surface, distance, size of towns, etc.	S.D., pp. 183-195, 152-154 Ford - Freeway Maneuvers
59 - Simulator	Area - Expressways Leaving the expressway Activity - Filmstrip "Limited Access Highways" - Filmstrip "Leaving the Freeway" - 16 minutes - Emphasize use of deceleration lane	S.D., pp. 183-195 Shell Ford - Freewa Maneuvers
60 - Range	Area - Expressways Driving on expressways Leaving expressways Activity - Range Pattern #18	Range Pattern section of this guide Page 81.

H. UNIT VIII - ENGINEERING AND OWNERSHIP (6 days)

Purpose

The purpose of this unit is to enhance the student's knowledge in regard to engineering and ownership of vehicles and roadways. Upon completion of this unit the students should exhibit the following competencies.

Competencies

1. Knows the general function and indications of malfunction of the various systems of motor vehicles.

2. Understands steps to be followed in selection and purchase of an automobile, as well as the responsibility for owning and maintaining an automobile.

3. Knows various aspects of engineering and ownership in regard to city, county, state, and interstate roadways.

Unit Instructional Outline

Instruction in this unit should be centered around the following content areas:

1. Motor Vehicles
   a. systems
   b. maintenance
   c. purchasing

2. Roadways
   a. city
   b. county
   c. state
   d. interstate

Instructional Sequence

Day & Teaching Station	Content Areas & Activities	Reference
61 - Classroom	Area - Motor Vehicles Systems-steering, fuel, cooling, electrical, lubrication Maintenance Activity - Discuss parts and proper function of each of the systems listed above - Discuss indications and proper action in regard to malfunctions of various systems - Point out economical and safety values of preventative maintenance in regard to systems	S.D., 218, 233, 225-277, 247, 297-298, 226-227, 218, 231, 319-320, 186, 228
62 - Simulator	Area - Motor Vehicles Systems - "Power Train" Maintenance Activity - Film "Shift for Yourself" - Discussion on "Power Train" from combustion chamber to drive wheels - Point out difference in automatic and stick shift	Allstate Teachers' manual
63 - Range	Area - Motor Vehicles Systems - braking, steering, fuel, electrical, cooling, "Power Train" Maintenance Activity - Range Pattern #19	Range Pattern section of this guide Page 83.
64 - Classroom	Area - Motor Vehicles Purchasing Activity - Point out importance of dealing with a reputable car dealer - Points of special emphasis; clear title, interest rate on loans, insurance, and other paper work	S.D., pp.237-247

	- Bring in a salesman from a reputable car lot to discuss this subject - Discuss points to look for when purchasing a used automobile. These are to be applied on the range.	
65 - Simulator	Area - Roadways city, state, county interstate Activity - Discuss how the various roadways above are financed - Point out cost of maintenance for these roadways, emphasize cost of litter - Point out controls on construction such as cement reinforcement, inclines, vision distances, etc. - Bring in consultant from local unit of Texas Highway Department, Engineering Department	S.D., pp.61, 83-84, 150-15 183-185, 256-271, 282, 270
66 - Range	Area - Motor Vehicles Purchasing Activity - Range Pattern #20	Range Patter section of this guide Page 84.

I. UNIT IX - TRAFFIC ACCIDENTS (6 days)

Purpose

The purpose of this unit is to expose the student to information concerning various facets of traffic accidents. Upon completion of this unit the students should possess the following competencies.

Competencies

1. Knows the frequency of traffic accidents in regard to type of road, time of day, weather conditions, etc.
2. Knows the losses, both economic and human, resulting from traffic accidents.
3. Understands and is able to detect circumstantial and underlying causes of traffic accidents.
4. Is aware of various characteristics of drivers who have been involved in traffic accidents such as age, license status, occupation, etc.
5. Knows the proper and lawful behavior in case of an accident.

Unit Instruction Outline

Instruction in this unit should be centered around the following content areas.

1. Frequency of Traffic Accidents
    a. fatal accidents
    b. non-fatal accidents
    c. factors related to the frequency of accidents
2. Losses Resulting from Traffic Accidents
    a. human losses
    b. economic losses
3. Causes of Traffic Accidents
    a. circumstantial causes
    b. underlying causes
4. Drivers Involved in Traffic Accidents
5. Traffic Accident Case Studies

Instructional Sequence

Day & Teaching Station	Content Areas & Activities	Reference
67 - Classroom	Area - Frequency of Traffic Accidents Fatal accidents Non-fatal accidents Related factors - when, where, vehicles Activity - Utilizing reference material, have a class discussion on the frequency of fatal and non-fatal accidents in the state. Point out increase or decrease for two or three years and on this basis, project figures for the ensuing two years. - Have five students on a panel and let other students ask the panel questions on factors related to accidents.	Motor Vehicle Traffic Accidents DSP 11-27, 42- A Tragedy of Errors-Travel Insurance Co. Accident Fact National Safe Council
68 - Simulator	Area - Losses Resulting from Accidents Human Economic Activity - With aid of students break human and economic losses down to the individual in the state. - Point out the amount of human losses from traffic accidents as compared to human losses in wars	Motor Vehicle Traffic Accidents DSP 2-3, 5-10
69 - Range	Area - Causes of Traffic Accidents Activity - Range Pattern #21	Range Pattern section of th guide. Page 8
70 - Classroom	Area - Causes of Traffic Accidents Circumstantial Underlying	Motor Vehicle Traffic Accidents DSP 28-36

	- Use discussion of the meaning of circumstantial and underlying causes - Use reference material to point out circumstantial causes of accidents - Promote student thought as to the possible underlying causes of accidents - Discuss which type of cause would be best to eliminate in an effort to reduce accidents	
71 - Simulator	Area - Drivers Involved in Traffic Accidents Characteristics such as age, occupation, etc. Hypothetical case studies Activity - Use reference material to determine driver characteristics which are associated with a high rate of accidents - Seek solution as to why certain driver characteristics positively correlate with traffic accidents - Design or have students design hypothetical traffic accidents and analyze these accidents in determining causes and preventional measures	Motor Vehicle Traffic Accidents - DPS 37-41 Be Your Own Traffic Judge National Safet Council
72 - Range	Area - Advanced Driving Skills Activity - Range Pattern #22	Range Pattern Section of thi guide. Page 8

J. UNIT X - TRAFFIC SAFETY PROGRAMS (6 days)

Purpose

The purpose of this unit is to enhance the students' knowledge of traffic safety programs, and to build an appreciation for an attitude of support for various safety programs conducted by state agencies and other groups. At the conclusion of the unit the students should possess the following competencies.

Competencies

1. Is aware of present day programs on the national, state, and local levels designed to promote traffic safety.
2. Appreciates the purpose and efforts of persons involved with the organization and administration of traffic safety programs.
3. Lends personal support to traffic safety programs by word and deed.
4. Is concerned with the improvement of traffic safety programs as revealed through thought and action in this regard.

Unit Instructional Outline

Instruction in this unit should be centered around the following content areas.

1. National and State Government Programs
    a. National Highway Safety Act (P.L. 89-564 Sept. 9, 1966)
    b. Highway Safety Action Program
    c. Driver Improvement Programs
    d. New-law
2. Programs of Interested Groups
    a. American Automobile Association
    b. Insurance Companies
    c. Lay Programs

Instructional Sequence

Day & Teaching Station	Content Areas & Activities	Reference
73 - Classroom	Area - Government Programs National Highway Safety Act Highway Safety Action Program Driver Improvement Programs Activity - Discuss reference material emphasizing the need for pupil participation in programs - Stress the desirability of functional driver improvement programs	Highway Safety Action Program and the President's Highway Safety Action Program Inspection & Planning Div. of Dept. of Public Safety
74 - Sim Simulator	Area - Government Programs National Highway Safety Act Highway Safety Action Program Activity - Point out past and present actions under the program and contemplate suggested improvements for the future - Analyze driver improvement programs and suggest possible improvements	Seven Steps Traffic Safe National Comm tee on Safe Education of N.E.A.
75 - Range	Area - Advanced Driving Skills Activity - Range Pattern #23	Range Pattern section of this guide Page 90.
76 - Classroom	Area - Programs of Interested Groups American Automobile Assoc. Insurance Companies Activity - Discuss the role and activities of the AAA in traffic safety - Discuss why insurance companies are interested in traffic safety and enumerate some individual company programs	Free Materials and Services For Driver Education Courses - AAA No. 3309 - Kit A. Basic Driver Education - AAA

Day & Teaching Station	Content Areas & Activities	Reference
77 - Simulator	Area - Programs of Interested Groups Lay Programs Activity - Discuss the purpose and role of lay traffic safety programs - Emphasize cooperation between lay groups and legally constituted authority in regard to traffic safety	
78 - Range	Area - Advanced Driving Skills Activity - Range Pattern #24	Range Pattern section of this guide. Page 92.

K. UNIT XI - REVIEW, POST-TESTING, ADVANCED SKILLS, AND INDIVIDUAL PRACTICE (6 days)

Purpose

The purpose of this unit is to: (1) review what has been covered in the classroom and simulator, (2) carry out post-testing activities, and (3)give students experience in advanced driving skills on the range and in individual practice as needed.

Day & Teaching Station	Content	Reference
79 - Classroom	- Review - Obtain students' written opinion as to how the program could be improved	Sportsmanlike Driving
80 - Simulator	- Film #12 "Let's Review" - Obtain students' opinion in regard to the simulator	Allstate Teachers' Manual
81 - Range	- Range Pattern #25	Range Pattern section of thi guide. Page 94
82 - Classroom	- Psychological Testing Knowledge Administer Attitude Test	AAA
83 - Classroom	- Psychophysical Testing Night Vision Tests Complex Reaction Field of Vision Distance Judgement	AAA - Instruction manual for driver tests
84 - Classroom	- Psychophysical Testing Night Vision Tests Complex Reaction Field of Vision Distance Judgement	AAA - Instruct or's manual for driver tests

SECTION III - INSTRUCTIONAL CONTENT FOR RANGE PATTERNS

RANGE PATTERN #1

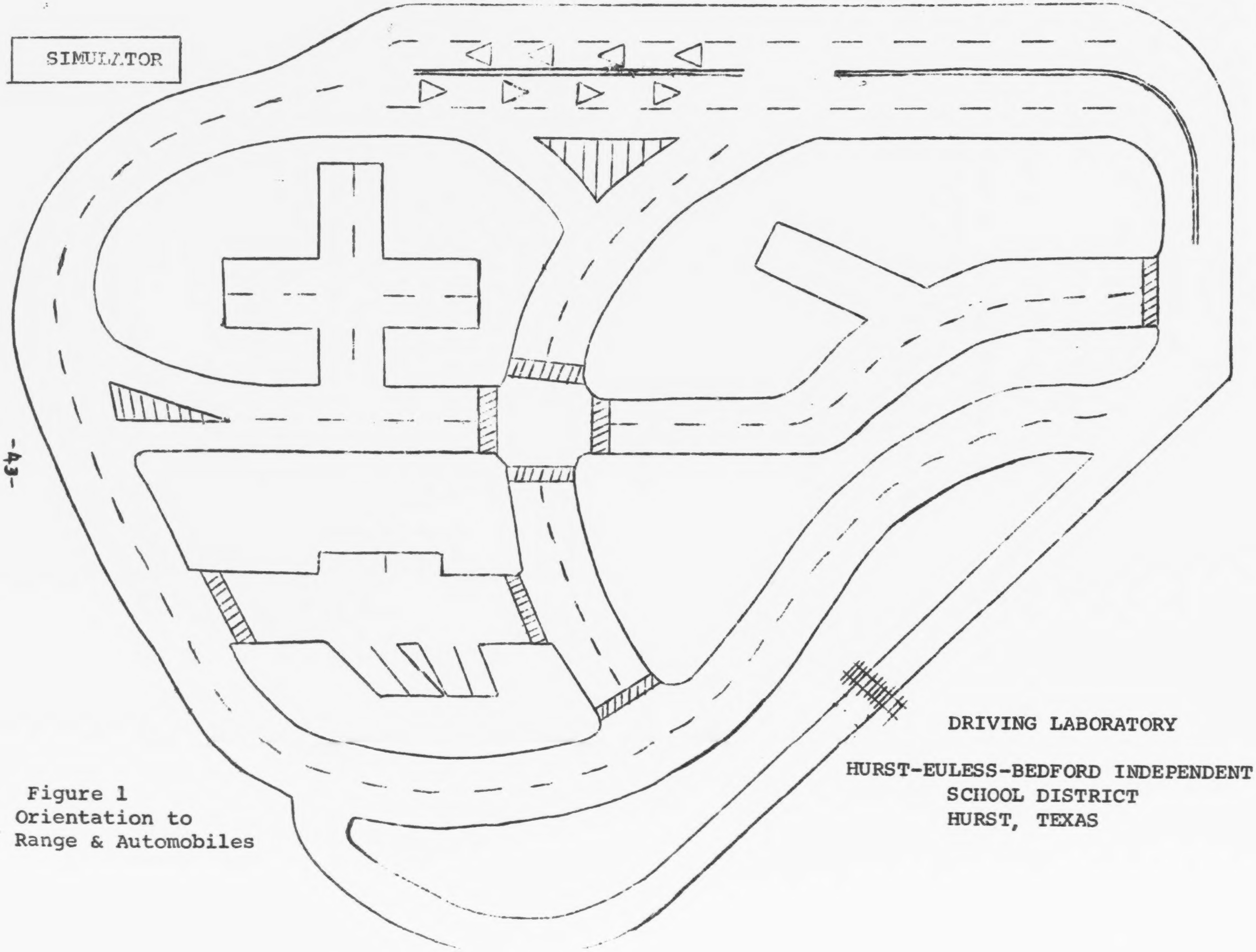
ORIENTATION TO RANGE AND AUTOMOBILES

The instructor should follow the outline below during this range period. The students should be at the range site during the entire period. The compartment check should be conducted with students in cars as shown in Figure 1.

A. Orientation to Range
   1. Note boundaries of range (see Figure 1).
   2. Distribute copies of range rules and discipline (Addendum A).
   3. Discuss rules, giving reasons for rules when needed.
   4. Discuss automobiles as to type, make, type of brakes, steering, numbers, keys, etc.

B. Compartment Check (students should be in automobiles)
   1. Seat adjustment
   2. Door closed and secured
   3. Seat belt buckled
   4. Adjustment of rear looking device
   5. Park brake position (on-off)
   6. Gear selector in park
   7. Check instrument gauges (turn key to left)
   8. Check communications for reception

C. Securing the Automobile
   1. Gear selector in park position
   2. Park brake set
   3. Key in off position
   4. Seat belt released
   5. Door unlocked
   6. Check traffic and open door with right hand
   7. Depart the automobile, continue checking traffic



DRIVING LABORATORY

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SCHOOL DISTRICT
HURST, TEXAS

Figure 1
Orientation to
Range & Automobiles

ADDENDUM A

DRIVER EDUCATION RANGE DISCIPLINE

1. Students must report promptly to the range at designated time.

2. Obtain keys from designated place.

3. Students will enter cars only upon signal from the instructor.

4. You are to always enter and exit from the curb side when in danger area.

5. No student will start or move the car until given signal by the instructor.

6. The driver shall always observe the following starting procedure after entering the automobile:

   A. Check to see that all doors are locked and parking brake is set
   B. Adjust your car seat
   C. Fasten your seat belts
   D. Adjust the rear and side view mirrors
   E. Driver should check to see that all passengers have their seat belts fastened.
   F. Put cover foot on brake
   G. Check to see that selector lever is in park-"P"
   H. Start engine
   I. Check instrument gauges
   J. Check traffic
   K. Select proper gear
   L. Release parking brake
   M. Give proper signal
   N. Check traffic
   O. Enter street when traffic is clear

7. There will be no passing except by signal from the instructor.

8. The speed limit of the range will be a maximum of 10 M.P.H. unless changed by the instructor.

9. When following another car remain at least five car lengths behind.

10. Be alert, watch the car in front of you, and signal whenever you stop or turn.

11. If student becomes confused, give stop signal and consult with the instructor.

12. Students will not change drivers until told to do so by the instructor.

13. Keep both hands on the steering wheel, except when signaling or backing.

14. When driving, do not turn head to look at the teacher or at the communication unit.

15. There is to be no conversation with fellow students while driving.

16. Always leave cars properly secured.

17. Always return keys to designated place

18. In the event of a possible accident or collision, the passenger should always apply the dual control brake.

19. Pay attention to the instructor and do only as you are instructed

20. At the close of the period the driver will park as specified by the instructor.

21. Always know the number or letter of the car you are driving.

22. There should never be more than four students in a car.

23. Eating or drinking not allowed in the cars during range or on street practice.

24. Directional signals will be used on all turns until you are told by the instructor to use manual signals.

25. Seat belts will always be worn when in the cars.

26. The car radio is to be used only for communication from the instructor.

27. The air conditioner is not to be used on the range.

28. Be sure to watch your warning lights and temperature gauge.

RANGE PATTERN #2

STARTING PROCEDURES AND CREEPING

This pattern is designed to give the students the initial experience needed in learning to control the automobile. Procedures for conducting the pattern are given in the following outline:

A. Preparations
   1. Cars positioned as shown in Figure 2
   2. Students assigned and seated in cars

B. Compartment Check - as covered in Pattern 1

C. Starting Procedure
   1. Foot on foot brake
   2. Turn ignition key and start engine
   3. Place gear selector in low
   4. Release park brake
   5. Give left signal
   6. Check traffic by looking over left shoulder

D. Creeping Procedure
   1. Enter right lane gradually with foot poised on foot brake, let engine idle
   2. Position car in center of right lane, engine still idling
   3. On range master command, gradually apply foot brake bringing the car to smooth stop
   4. Repeat creeping maneuver three or four times
   5. Secure automobile - as covered in Pattern 1
   6. Change drivers, repeat starting and creeping procedure

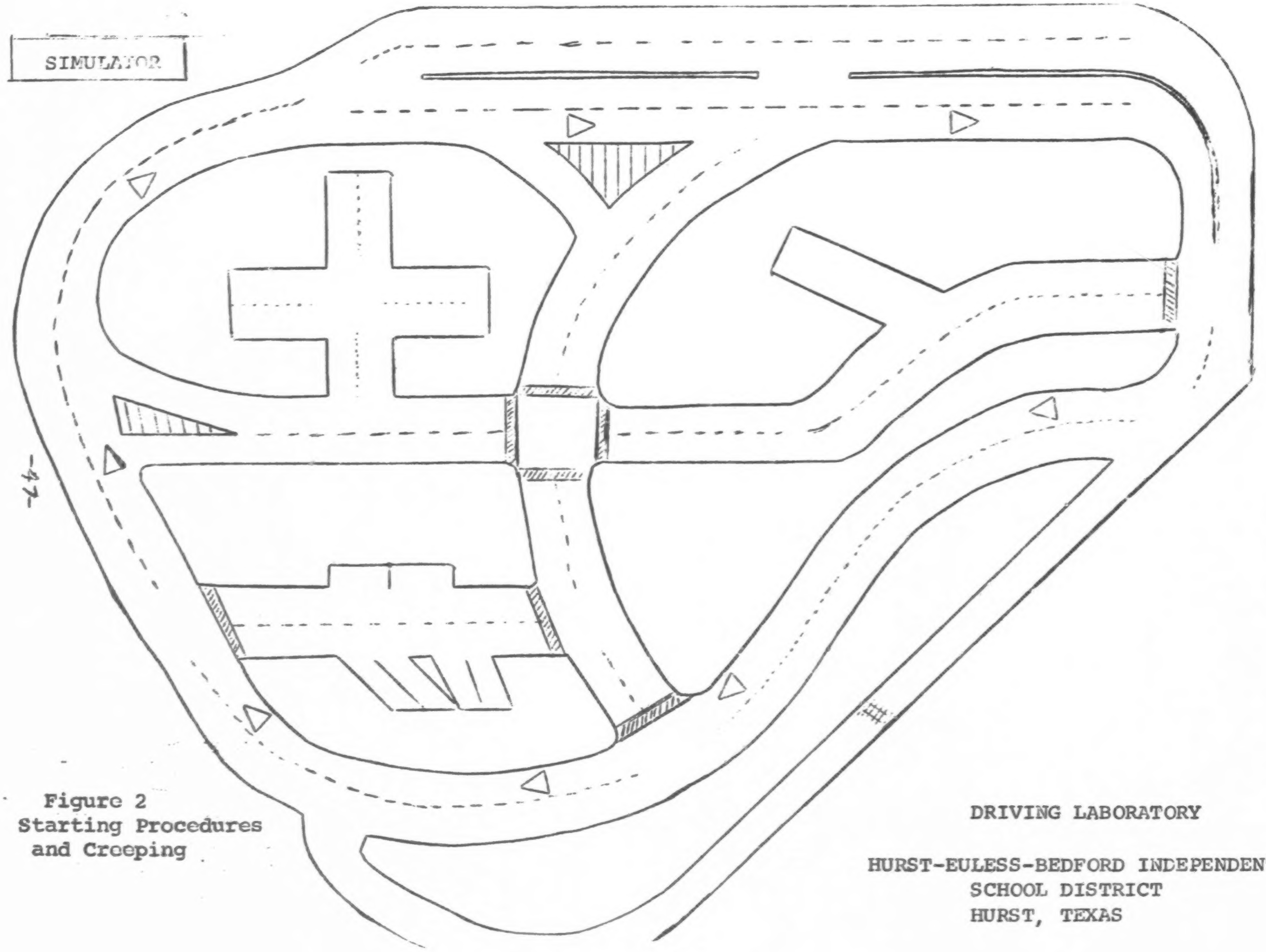
SIMULATOR
DRIVING LABORATORY
HURST-EULESS-BEDFORD INDEPENDENT
SCHOOL DISTRICT
HURST, TEXAS

Figure 2
Starting Procedures
and Creeping

RANGE PATTERN #3

BEGINNING TURNS

This pattern is designed to provide the students with experience in learning to control the automobile, especially in regard to turns. The beginning position and pattern routes for the cars are given in Figure 3 on the following page. The outline below will aid the instructor in carrying out this range pattern.

A. Preparation
   1. Place cars in starting position
   2. Place stanchions as shown in Figure 3
   3. Have students assigned to and seated in cars
   4. Stress strict compliance with suggested speed: idle speed only at this time

B. Procedures
   1. Command car number one to proceed to stanchion number one and execute a left turn
   2. Command car number one to continue the pattern, making sure the driver knows which turn to make
   3. When car number one completes the second turn, have car number two begin. Other cars should be started in the same manner.
   4. Command car number one to stop at the point from which it started. Change drivers and repeat with next driver.
   5. When all students have completed this pattern the instructor should have the cars turned around and follow the pattern in the opposite direction.

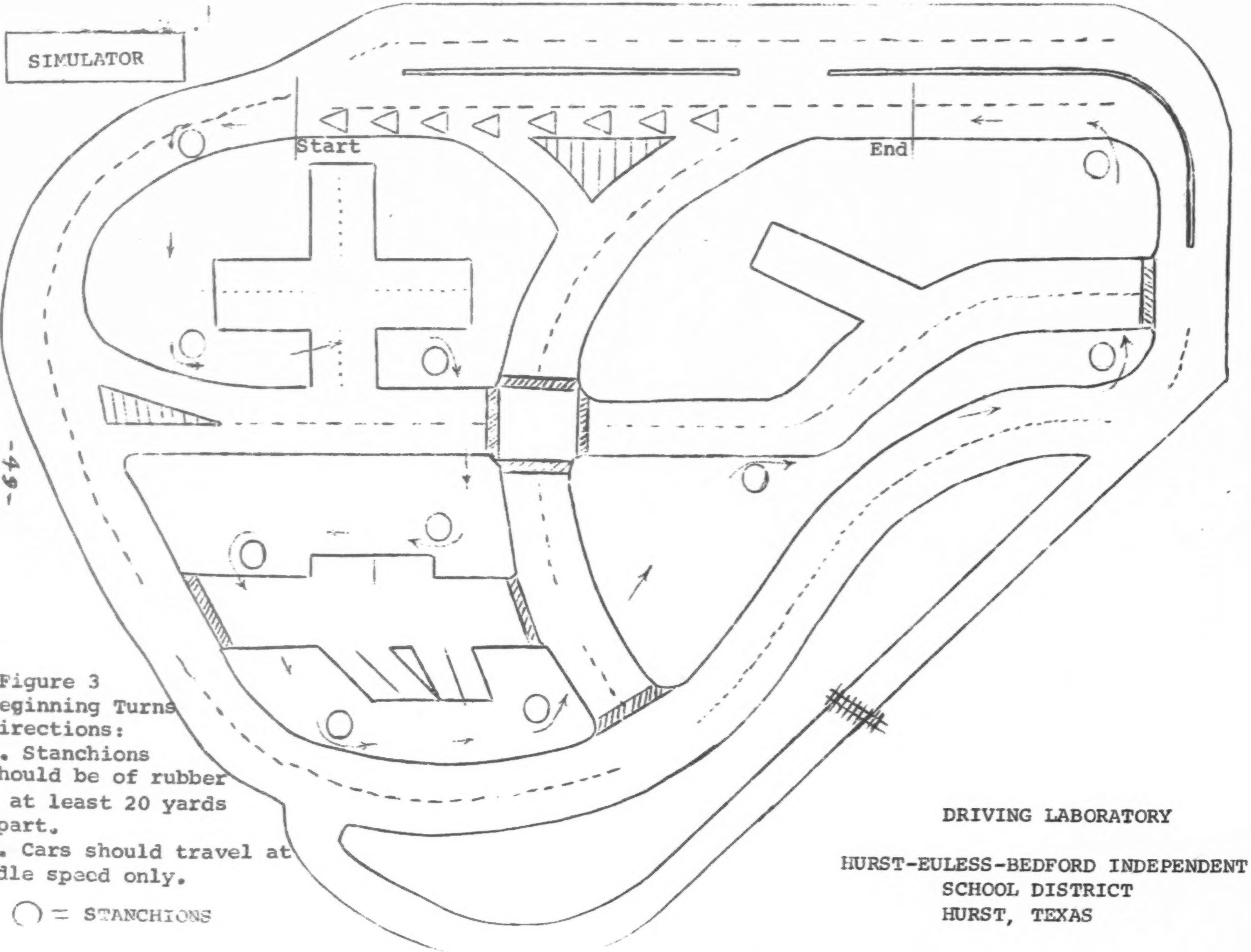
SIMULATOR
Start
End
◯ = STANCHIONS

Figure 3
Beginning Turns
Directions:
1. Stanchions should be of rubber & at least 20 yards apart.
2. Cars should travel at idle speed only.

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RANGE PATTERN #4

BEGINNING CITY DRIVING

This pattern exposes students to three aspects of city driving, involving: (1) speeds up to 10 miles per hour, (2) advanced turns and (3) traffic close behind and in front. Instruction during this range period should be conducted according to the following outline. Figures 4a and 4b depict the routes to be followed during this range period.

A. Preparations
   1. Have cars arranged as shown in Figure 4a
   2. With students in the cars, the range master should briefly explain that all cars will follow the same route, in the right hand lane, unless otherwise instructed.
   3. Caution students to hold their speed to no more than 10 M.P.H.

B. Procedures
   1. Instruct all drivers to start their engines, leaving their gear selector in park until otherwise instructed.
   2. Have car number one place the gear selector in drive and proceed on the designated course.
   3. When car number one passes point A, instruct car number two to place gear selector in drive and follow car number one. Other cars are instructed as car number two in ascending order.
   4. All first drivers should be allowed to complete the first route at least two times. At the completion of the second round all cars should be stopped at the starting line and a different student take the driver's position. The same procedure should be followed until all students have driven the first route. This route is shown in Figure 4a.
   5. The second route, as shown in Figure 4b, is in the opposite direction of the first. To turn the cars around the person driving first should assume the driver's position. Care should be exercised by the range master in having the students turn the cars around.
   6. All students should drive the second route a minimum of two times. The same basic procedure used in the first route should be employed on the second.

7. The range master may at his discretion instruct any driver to follow the alternate route noted in Figures 4a and 4b. However, at this time it is advisable to allow only the more adept students to do this, as such actions involves a maneuver to re-enter the flow of traffic.
8. Two-way traffic should not be included at this time.

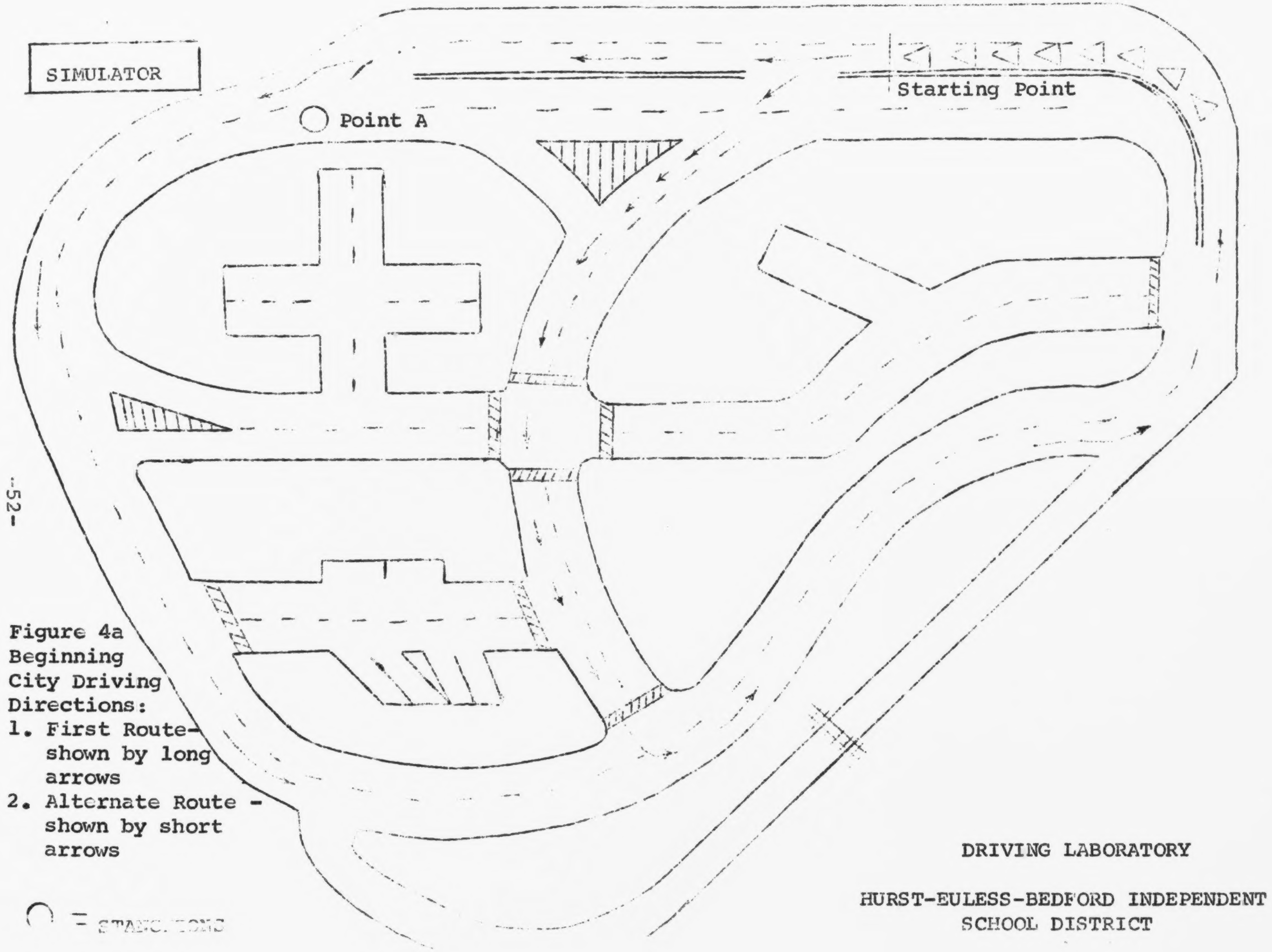
SIMULATOR
Point A
Starting Point

Figure 4a
Beginning
City Driving
Directions:
1. First Route-
shown by long
arrows
2. Alternate Route -
shown by short
arrows

○ = STANCHIONS

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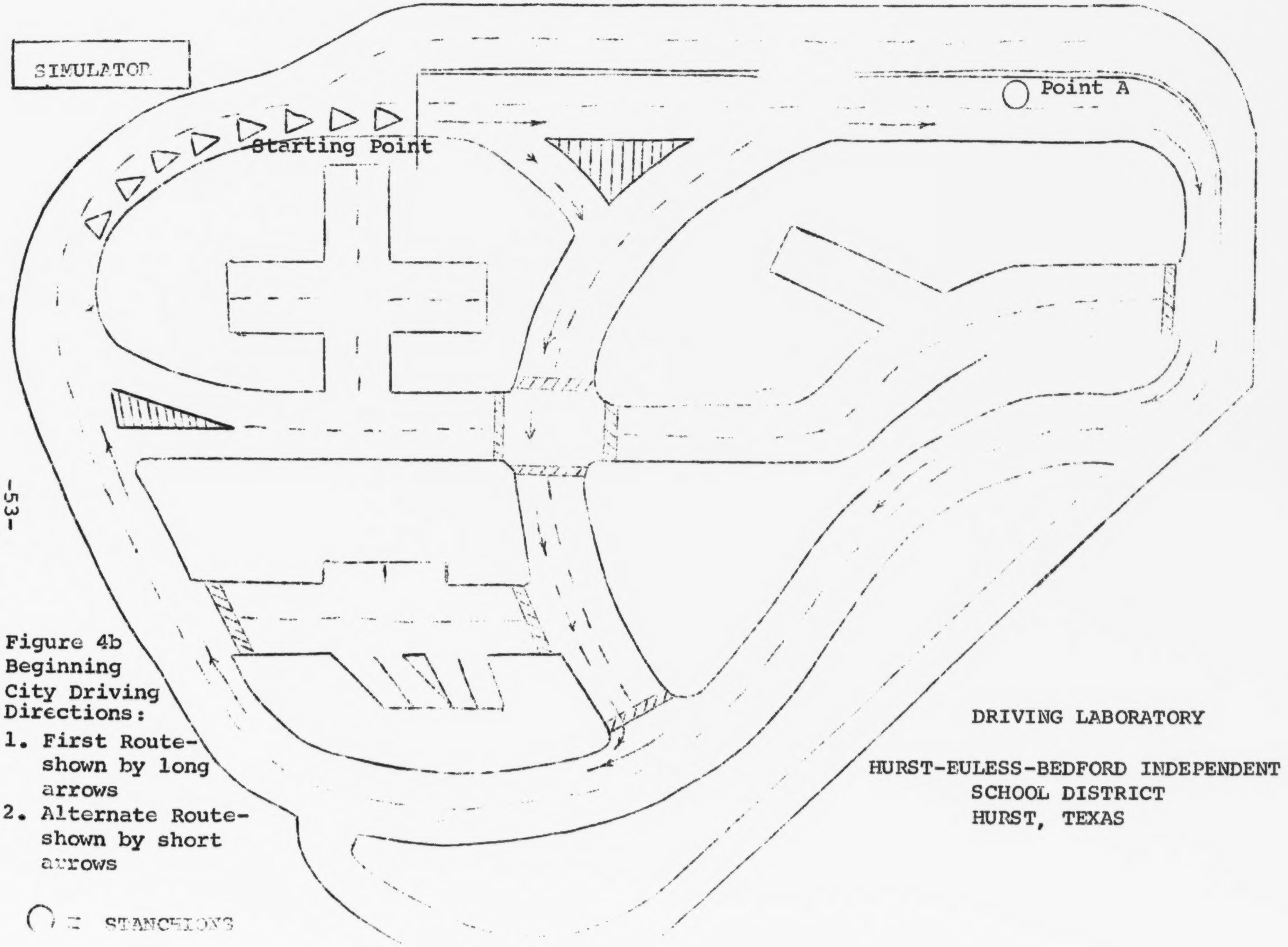
SIMULATOR
Starting Point
Point A

Figure 4b
Beginning
City Driving
Directions:

1. First Route-
   shown by long
   arrows
2. Alternate Route-
   shown by short
   arrows

○ = STANCHIONS

DRIVING LABORATORY

HURST-EULESS-BEDFORD INDEPENDENT
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HURST, TEXAS

RANGE PATTERN #5

LAWS IN THE TRAFFIC ENVIRONMENT

The laws discussed heretofore should be experienced when possible within this range pattern. In essense, this pattern represents practical application of laws present in the traffic environment.

A. Preparation
   1. Arrange signs on the range as shown in Figure 5
   2. Have cars aligned as shown in Figure 5 for the beginning of the pattern.
   3. Instruct drivers to obey all traffic signs, as well as the prevailing range rules.
   4. Stress the proper use of turn signals and lane position

B. Procedures
   1. With students assigned to and seated in the cars have all drivers start their engines simultaneously.
   2. Command all drivers to place gear selector in drive and proceed in their present lane around the perimeter of the range. As the cars move, they should be spread out by commands from the range master
   3. When cars have traveled around the range at least once and are adequately spaced, the range master shoul begin giving instructions to specific drivers.
   4. Via specific instructions to each driver, the range master should make sure each driver encounters the following situations:
      a. Right-of-way from 4-way stop intersection
         1. two cars
         2. three cars
         3. four cars
      b. Yield with approaching car
      c. One-way street entrance
      d. Left turn at 4-way stop intersection with another car straight across the intersection intending to proceed straight ahead
      e. Two cars across the intersection from one another, both of which desire to make a left turn
   5. The instructor will think of more situations in which to place the drivers. Situations should be used that exhibit a law.

6. Insofar as possible, the instructor should keep four cars going in each direction. This entails thinking ahead and keeping alert to the situation.
7. In order to change drivers, the instructor should command all cars to return to their starting position in the shortest manner possible while staying on the streets and not infracting any laws or range rules. Observe to see if the drivers apply rational thought to this problem.
8. When starting positions have been reached by all cars, command all drivers to secure their cars and change positions with another student in their car.
9. Repeat procedure for new drivers.

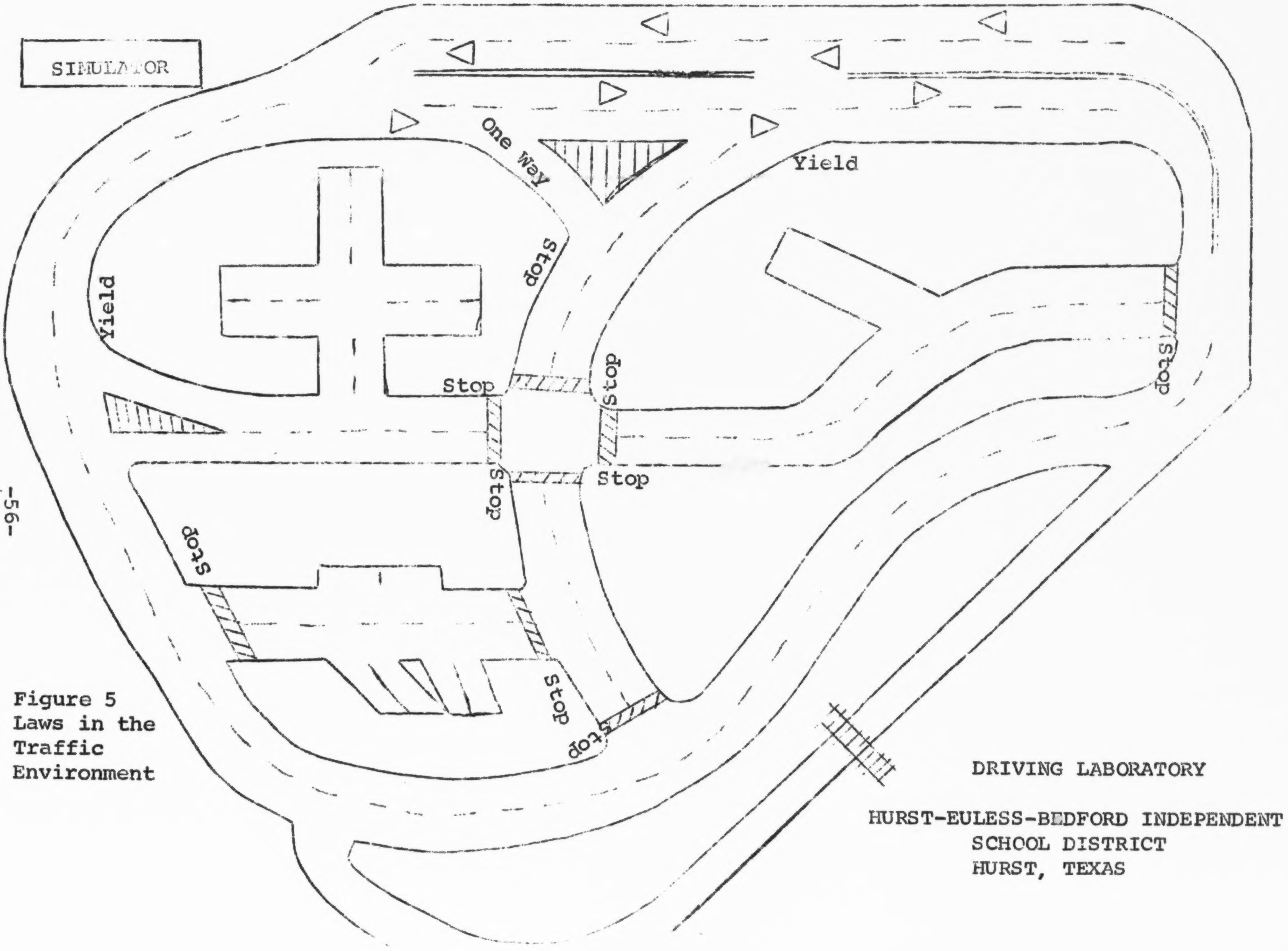
SIMULATOR
One Way
Yield
Stop
Stop
Stop
Stop
Stop
Stop
Stop
Stop
Stop
Stop
Yield

Figure 5
Laws in the
Traffic
Environment

DRIVING LABORATORY

HURST-EULESS-BEDFORD INDEPENDENT
SCHOOL DISTRICT
HURST, TEXAS

RANGE PATTERN #6

LAWS IN THE TRAFFIC ENVIRONMENT

This pattern is a continuation of practical application of laws. In addition, the maneuvers and actions herein are designed to aid the students in developing skills necessary in controlling an automobile in close quarters, and in taking correct actions in case of mechanical difficulty.

A. Preparation
   1. The traffic signs as shown in Figure 6 should be utilized for this pattern.
   2. When students are not experiencing the new maneuvers in this period, they should be involved in some of the same situations as covered in Range Pattern #5. The range master must be alert and give appropriate commands.
   3. Have cars arranged as shown in Figure 6 for the beginning of the pattern.

B. Procedures
   1. With students assigned to and seated in cars, command drivers to start engines and proceed in their present direction.
   2. As cars begin moving, the range master should start giving instructions to specific drivers. Each driver should experience the following situations at lease once during this period.
      a. Turn arounds
         1. x-ing maneuver in area A
         2. single street turn around in area B
      b. Right and left turns
         1. from two-way street onto one-way street from both directions
      c. Mechanical difficulty - to be conducted in area C
         1. pull completely off the street in the correct manner
         2. raise hood and wait for command from range master
         3. re-enter traffic flow using correct procedure
   3. When it is time to change drivers the range master should command all drivers to come to a smooth stop, secure the car, and change positions with a student in their car.
   4. Special attention should be given to the giving of signals and the selection of the proper lane from which to make a turn, both to be executed at the proper time.

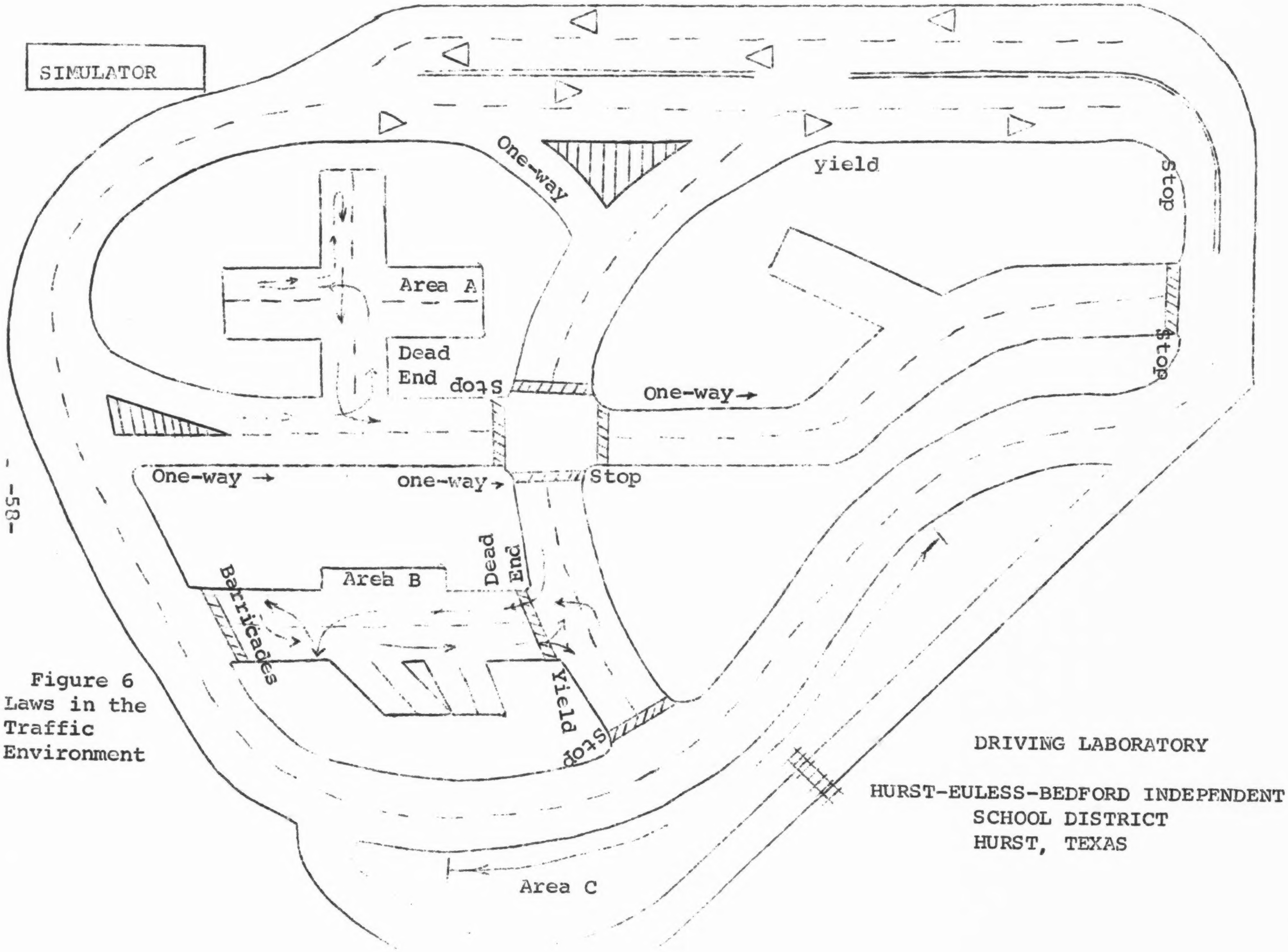
SIMULATOR
Area A
Dead End
Stop
One-way
yield
Stop
Stop
One-way →
One-way →
one-way →
Stop
Dead End
Area B
Barricades
Yield
Stop
Area C

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Figure 6
Laws in the
Traffic
Environment

RANGE PATTERN #7

VEHICLE INSPECTION

During this range period the instructor should follow the outline as shown below. The pattern is designed to enhance students' knowledge of the inspection requirements and standards as required by law in Texas.

A. Preparation
   1. Automobiles should be stationed as shown in Figure 7.
   2. Three students should be assigned to each automobile.
   3. Automobiles should be properly secured.

B. Procedures
   1. Studends should be instructed to inspect each point as told to do so by the range master. The teacher should walk from car to car as instructions are being given.

   2. Inspection should proceed according to the following points:
      - Horn - a clear sound should be made when horn button is depressed.
      - Windshield Wipers - action and condition of blades should be noted.
      - Brakes - cars with standard brakes should have 2 inches of reserve brake pedal. Cars with power brakes should have 1 inch of reserve brake pedal.
      - Beam Indicator - a light clearly visible to the driver should indicate high headlight beam.
      - Tail Lamp - should give red light when lights are on. Lens should be free of cracks or other defects.
      - Stop Lamps - should make a red light when brakes pedal is depressed.
      - License Plate Light - should expend a white light over the license plate when lights are on.
      - Red Rear Reflectors - should be in good repair, free from cracks and chips.
      - Head Lamps - should be free from cracks and chips. The setting of head lamps cannot be checked here as technical equipment is required for this operation.

- Motor, Serial or I.D. number - should be located for identification purposes.
- Seat Belts - should be anchored with threaded lugs. Buckles should be easily operated.
- Steering - the steering wheel cannot have more than 2 inches lash with front wheels off the ground. This may have to be checked with wheels on the ground in class.
- Wheels and Rims - should be free of bends and other defects which would make the car hard to control.

Figure 7
Vehicular Inspection

RANGE PATTERN #8

MENTAL AWARENESS WHILE DRIVING

This pattern is designed to teach students to be mentally alert while operating a motor vehicle. The actual driving maneuvers are essentially extensions of previously experienced ones. Mental alertness is taught and checked through individual driver responses to specific commands by the range master.

A. Preparations
  1. Have cars aligned as shown in Figure 8a
  2. Distribute response forms, Figure 8b, one to each student and instruct student to fill in his name and period number.
  3. Briefly explain the use of the response forms. Points of emphasis:
    - observing students should not talk to the driver and only to each other as required by checking responses given by the driver to range master commands.
    - the observer seated in the front with the driver should check the response sheet, asking for assistance from the observer seated in the back if needed.
    - responses resulting from commands given in reference to activity behind the car in question should be noted by the observer in the back seat, the observer in the front seat should watch the eyes of the driver to see that the driver does not use any rear looking devices in order to give the correct response. A response given after rear looking devices are used should be marked incorrect.
    - commands in refernce to activity besides the car should be treated as if the activity were behind the car as previously explained. The driver should not have to look to give a correct response.
    - the type of command should be recorded immediately after the recording of the response.
    - when a student's driving turn is over, that student should obtain his score as called for by the form shown in Figure 8b. The student should be encouraged to analyze his response form during out-of-school study, noting weak and strong points.

B. Procedures

1. Maneuvers conducted should be basically the same as the ones already experienced by the students. The range design and location of signs as shown in Figure 8a should suffice.
2. Commands to check mental awareness of drivers are noted below and are followed by student responses.
   - red alert - stop as quickly as possible without skidding
   - color front - give the color of the car immediately in front of you
   - action front - give the action or intended action as evidenced by signals of the car immediately in front of you
   - color back - give the color of the car immediately behind you
   - action back - give the action or intended action as evidenced by signals of the car immediately behind you
   - right side - note any immediate driving hazard to the right of your lane of traffic, if there is none, say "clear"
   - left side - note any immediate driving hazard to the left of your lane of traffic, if there is none, say "clear"
   - speed - give the speed at which your car is traveling. A definite answer should be given and should be considered correct if the true speed is that number or one digit to either side. For instance, an answer of 15 would be correct if the car were traveling 14, 15, or 16 miles per hour.

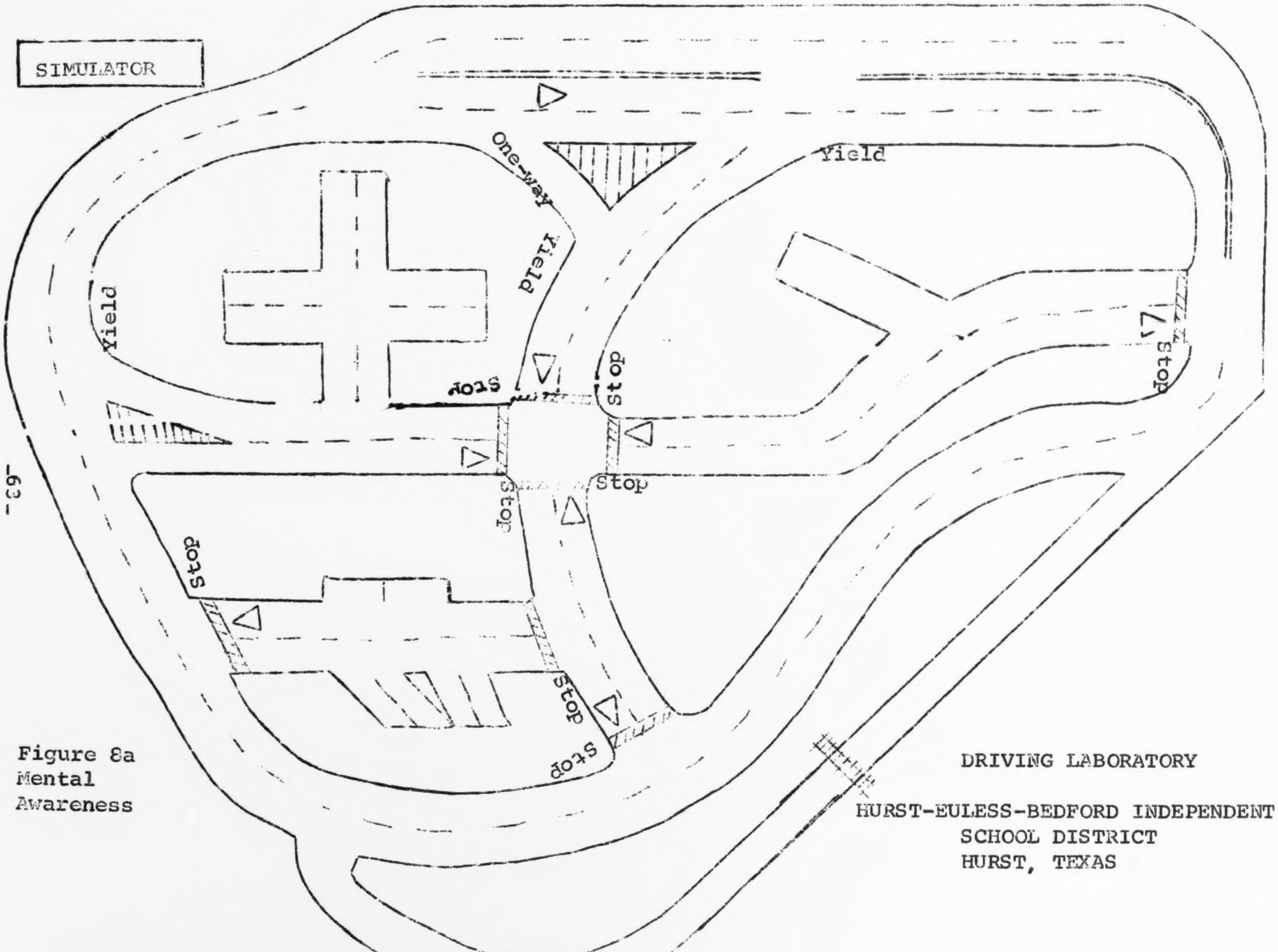
SIMULATOR
One-way
Yield
Yield
Yield
Stop
Stop
Stop
Stop
Stop
Stop
Stop
Stop
Stop

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Figure 8a
Mental
Awareness

MENTAL AWARENESS RESPONSE FORM

STUDENT ______________ PERIOD ______________

CHECKER ______________ DATE ______________

COMMAND	RESPONSE		TYPE OF COMMAND								
	Cor.	Inc.	Red alert	Color front	Action front	Color back	Act. back	Rt. side	Left side	Speed	Other
1											
2											
3											
4											
5											
6											
7											
8											
9											
10											
11											
12											
13											
14											
15											
16											
17											
18											
19											
20											

Total Responses ______________

Incorrect ______________

Correct ______________

Per Cent Correct ______________

Figure 8b

RANGE PATTERN #9

DISTANCE JUDGMENT AND BACKING

This pattern is designed to promote students' abilities in regard to judging the distance of objects in relation to the automobile. Backing procedures are also included in this pattern.

A. Preparations
   1. The route as shown in Figure 9 should be set up.
   2. Cars should be arranged for action as shown in Figure 9.

B. Procedures
   1. With students assigned to and seated in cars, the range master should have all drivers start their engines.
   2. Car number one should start and proceed in the indicated path, attaining a speed of 10 M.P.H., stopping with the front bumper of the car even with stanchion number one.
   3. Car number one should continue to the next stanchion, attaining a speed of 15 M.P.H., and stop with the front bumper even with stanchion number two.
   4. Car number one should now follow the indicated path toward stanchion number three, attaining the indicated speed, and stop with the front bumper even with the stanchion. As car number one turns toward stanchion number three, the next car in the starting line should proceed toward stanchion number one following the procedure as experienced by car number one. Other cars should begin in the same manner.
   5. After stopping at stanchion number four, car number one should turn left and proceed toward stanchion number five, and on to stanchion number six.
   6. After stopping at stanchion six, car number one should turn to the left and proceed to stanchion seven.
   7. After stopping at stanchion seven, car number one should back slowly to point A and stop. Car one should then select a forward gear and proceed to the starting line.
   8. The maneuver should be repeated in like manner except the rear bumper instead of the front bumper should be stopped even with each stanchion.
   9. At the completion of the second pattern the drivers should be changed and the pattern repeated.

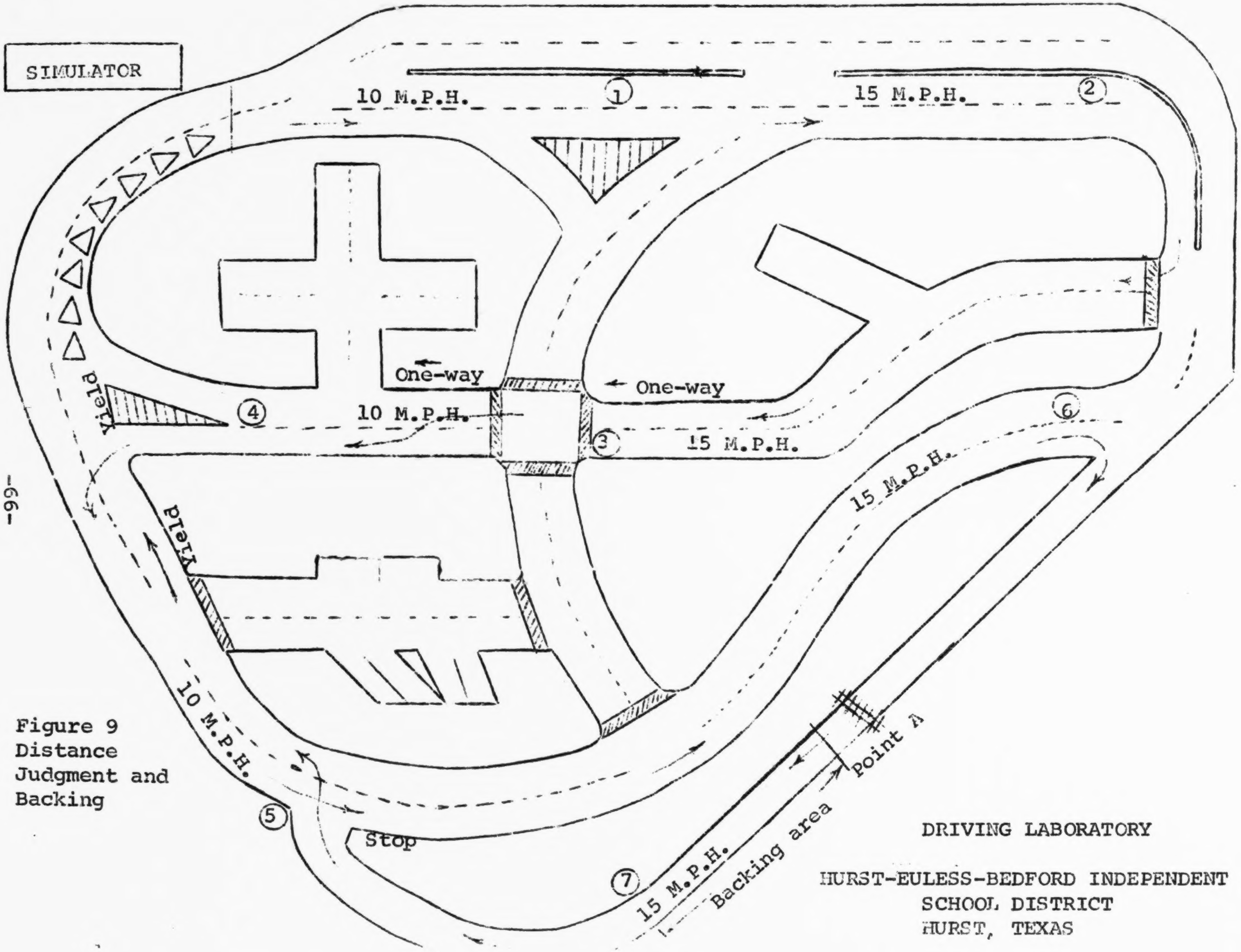
SIMULATOR
10 M.P.H.
①
15 M.P.H.
②
One-way
One-way
④
10 M.P.H.
③
15 M.P.H.
⑥
Yield
Yield
15 M.P.H.
10 M.P.H.
Point A
⑤
Stop
⑦
15 M.P.H.
Backing area

Figure 9
Distance
Judgment and
Backing

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HURST, TEXAS

RANGE PATTERN #10

SIMPLE REACTION, ANGLE AND PARALLEL PARKING

This pattern is designed to test reaction time and distance at various speeds, and to introduce the students to angle and parallel parking. Due to certain factors, two separate stations are needed for this pattern. The stations are on the same range but the cars do not leave certain areas.

A. Preparations
1. Have the cars arranged as shown in Figure 10.
2. The detonators should be affixed to the cars to be used for simple reaction testing.
3. Two 100 feet steel tapes will be needed.
4. Students should be assigned to certain areas- eight to the reaction testing area and sixteen to the parking area.
5. All students should have their record sheet for phychophysical tests in hand.
6. Clear instructions are extremely important here as the instructor can be at only one station at a time. Also, students will have to assist in conducting the patterns.

B. Procedures

In this pattern, the procedures are given separately for each station. Students should rotate in groups of two from one station to another.

Reaction station
1. In each car there must be a driver and a person to pull the detonator string.
2. Two persons to measure in the 20 M.P.H. area, and two persons for the same purpose in the 30 M.P.H. area.
3. From the starting point, the driver should attain a speed of 20 M.P.H. When this occurs, the passenger should pull the detonator string firing the first blank. When the driver hears the blank fired, he should hit the foot brake as soon as possible with the right foot and stop the car in a safe manner. The measuring persons should note the distance between the yellow marks in the pavement created by the firing of the blanks and report that distance to the passenger, who is to record the distance. This should be repeated in the 30 M.P.H. area.

4. When a driver has completed both reaction tests he should change positions with the person riding with him. When both students, beginning in the car, have completed both reaction tests, they should replace the two students measuring in the 20 M.P.H. area. The replaced students should rotate to the 30 M.P.H. area and measure there. The students relieved from the 30 M.P.H. area should take their reaction tests and then rotate to the parking area. This is only one way to rotate students during this period. The instructor may wish to devise his own.

Parking station

1. Only two cars with two students in each car should be driven in this area. The other four cars shown in Figure 10 should remain parked during the entire period.
2. The lead car in the parking area should execute a parallel parking procedure, make a turn as indicated and make two attempts at angle parking. Having completed both types of parking, the driver should change places with the observer. When both students have completed the cycle, they should position the car as they found it and rotate to the starting area for the reactions tests.
3. Extreme caution should be exercised in the parking area, especially when one car is parallel parking, and the other is angle parking. If either car crosses the center strip, a collision could easily occur.

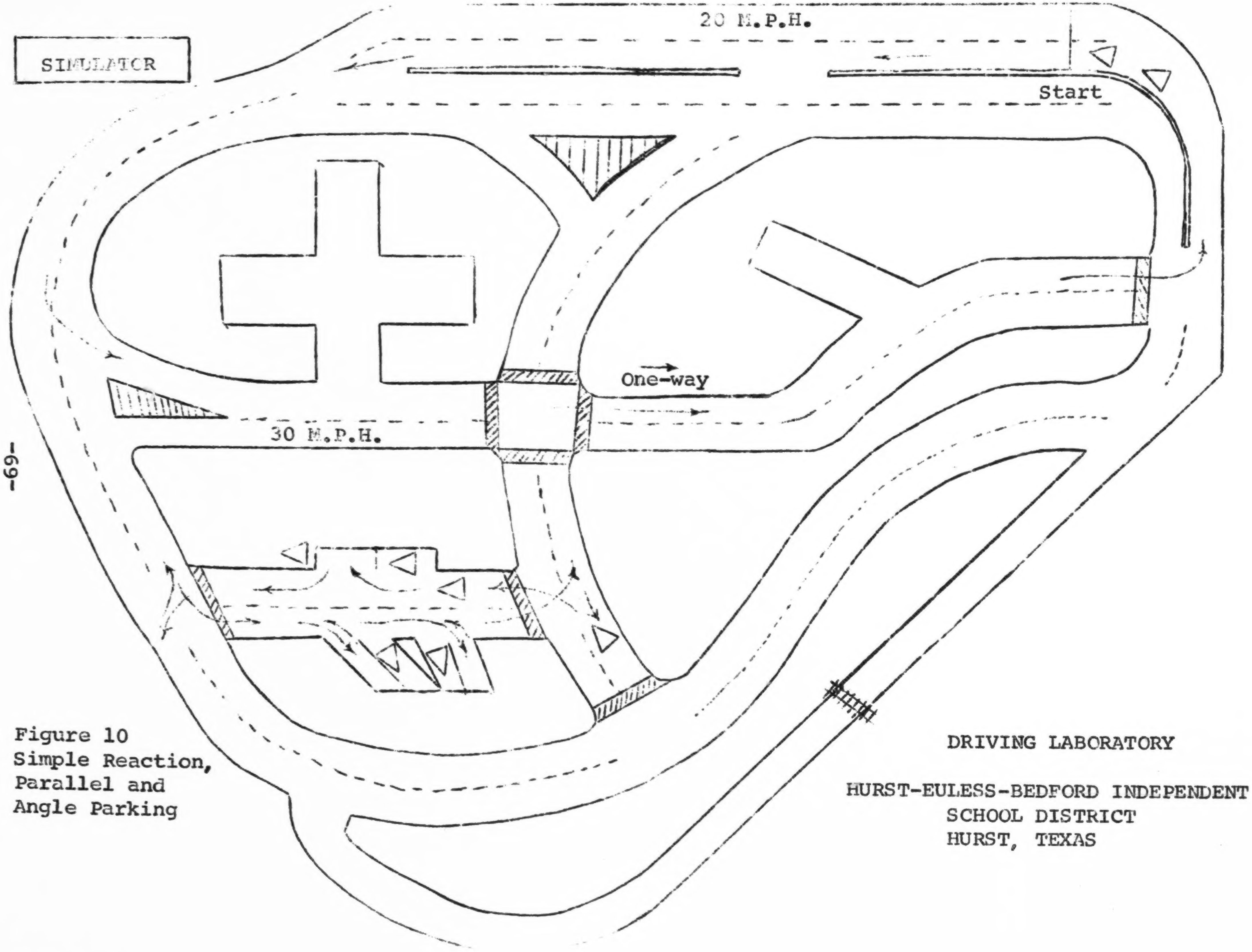
SIMULATOR
20 M.P.H.
Start
One-way
30 M.P.H.

Figure 10
Simple Reaction,
Parallel and
Angle Parking

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RANGE PATTERN # 11

SIMPLE REACTION, ANGLE AND PARALLEL PARKING

The range pattern is a continuation of Range Pattern #10. If the experiences in number 10 are completed before the end of the period, the instructor may desire to begin Range Pattern #12. In any case, three consecutive range days are devoted to Range Patterns 10, 11, and 12.

RANGE PATTERN #12

COMPLEX REACTION

This pattern is designed to test students' ability to react to a given situation. Simple reaction, as tested earlier, requires the student to stop only. In this pattern, the student must recognize the situation, take preventative or evasive action, and stop the car. Keeping the car under control and reacting quickly are of primary importance.

A. Preparations

1. The cars should be aligned as shown in Figure 11. The starting line and point A should be noted by lines or stanchions.
2. Three student helpers will be needed. They should remain behind Point A at all times when a car is in motion. Two of these students will measure and the third will record scores. A 100 foot tape and student record sheets, as well as a clip board will be needed.
3. The instructor should use a red flag to give signals to drivers. He should stand as indicated in Figure 11 and keep alert.
4. Make certain all seat belts are buckled and all doors are locked before testing in any car.

B. Procedures

1. The driver starts his engine, selects drive gear, and proceeds toward point A. Before reaching point A he must attain a speed of 10 M.P.H. and he must keep the car straddling the center line. When the car reaches point A the instructor should signal to the left or right.
2. When the driver sees the signal to either side, he must turn the opposite direct. A signal to the driver's left means a hazard is coming from that direction and he must turn away and stop as quickly as possible, of course, he must also keep control of his car.
3. When the driver turns, the instructor notes the point at which the front wheel crossed the center line. The distance from that point to point A is measured and recorded.
4. When the distance has been recorded and the helpers are in safe positions, the car completing the test should return to the end of the waiting line. The next car should move forward and so on.
5. Each driver should receive two chances and the average distance recorded as the final score.
6. The instructor should take all precautions necessary for the safety of all concerned.

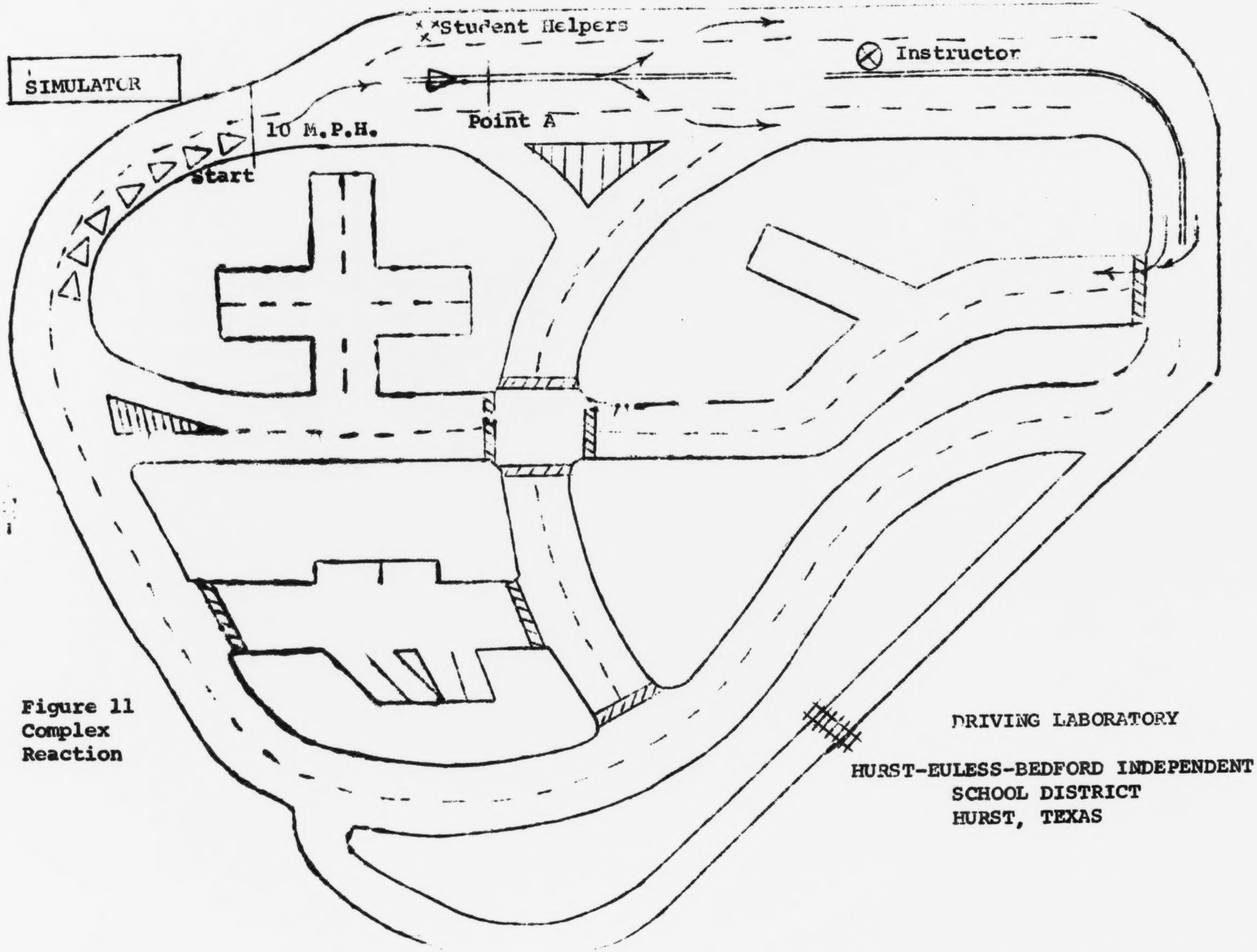
SIMULATOR
Student Helpers
Instructor
Point A
10 M.P.H.
Start

Figure 11
Complex
Reaction

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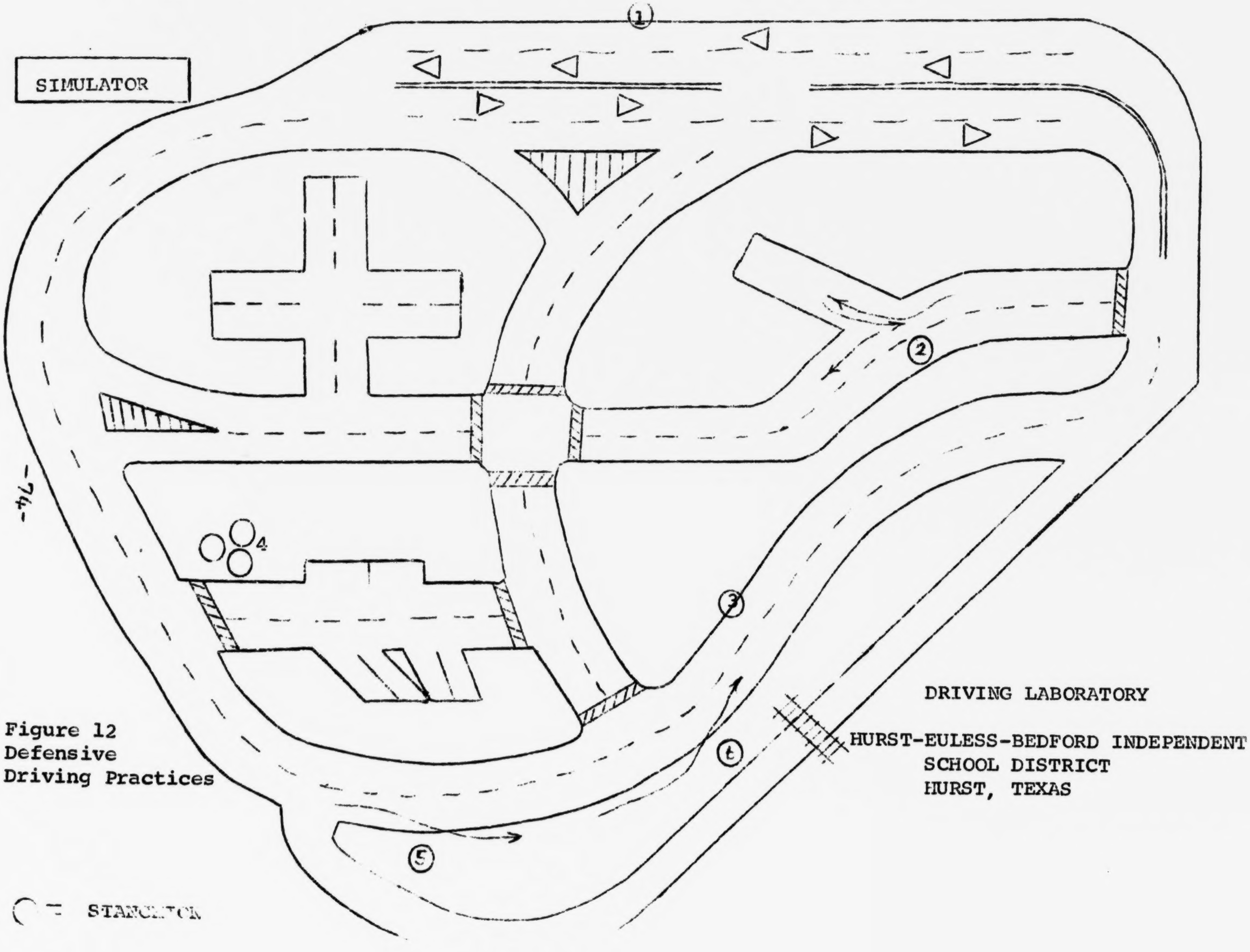
RANGE PATTERN #13

DEFENSIVE DRIVING PRACTICES

This pattern is designed to make the students aware of certain dangerous situations existing particularly in city driving. Desirable defensive driving practices should be practiced in regard to the mock situations.

A. Preparations
   1. Stanchions should be positioned as shown in Figure 12 at points, 1, 3, and 4. Stanchion one represents a parked car, stanchion three represents a bicyclist in the street, and stanchion four represents a group of children playing near the street.
   2. Cars should be located as shown in Figure 12 for the beginning of the pattern.

B. Procedures
   1. Normal two-way driving should be carried out with various situations arising.
   2. Special attention should be given to the more dangerous situations as noted.
      Point 1 - a car parked half off and half on the roadway
      Point 2 - backing out of a garage into the lane of traffic
      Point 3 - a bicyclist riding in the street
      Point 4 - children playing near the street
      Point 5 - pulling off the street for various reasons
      Point 6 - re-entering the street after pulling off to the side
   3. The instructor will see many instances in which a driver could have made a safer maneuver. He should verbally correct such action as he sees it.


SIMULATOR
1
2
3
4
5
6
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SCHOOL DISTRICT
HURST, TEXAS
○ = STANCHION

Figure 12
Defensive
Driving Practices

RANGE PATTERN #14

DEFENSIVE DRIVING

This pattern is designed to provide more student experiences with defensive driving techniques. Of particular importance in this pattern is a safe approach, entrance, and exit with respect to an intersection.

A. Preparations
  1. No special preparations required for this pattern.

B. Procedures
  1. Normal two-way driving should prevail.
  2. The range master should manipulate the cars in such a manner that each driver will encounter several intersection situations.
  3. Traffic situations encountered at electrically controlled intersections should be set up if possible.

RANGE PATTERN #15

EMERGENCY DRIVING PROCEDURES

The purpose of this range pattern is to give the students practice in handling emergency situations. Due to the danger of certain emergency situations, they will not be practiced. However, those situations not included in the pattern should be discussed and desirable procedures pointed out.

A. Preparations
   1. No special preparations are necessary for this pattern.

B. Procedures
   1. Normal two-way traffic
   2. Emergency stops should be commanded for all cars by signal, "red alert".
   3. Running off the road should be commanded for individual drivers when in a safe area.
   4. Blow outs should be commanded for individual drivers.
   5. Skidding, sudden loss of vision, and other situations should be discussed but not practiced.

RANGE PATTERN #16

HIGHWAY PASSING

The various aspects of overtaking and passing on the highway are encountered in this pattern. Only passing on the left should be allowed at this time.

A. Preparations
   1. Have range signs set as shown in Figure 13.

B. Procedures
   1. With four cars headed each direction, have the drivers start their engines and proceed around the range in their proper lane.
   2. Passing area is designated as the area between point A and point B on Figure 13.
   3. The range master should use commands to properly space the cars for the passing maneuver.
   4. Certain points involved in the passing maneuver should be emphasized as the maneuver is being conducted. They are:
      - speed control
      - traffic clearance
      - signaling
      - acceleration
      - deceleration
      - lane changes
   5. The instructor may allow passing maneuvers to be carried out at places other than the one noted in Figure 13.
   6. The range master should direct traffic in and through the range and not just on the outermost parts.

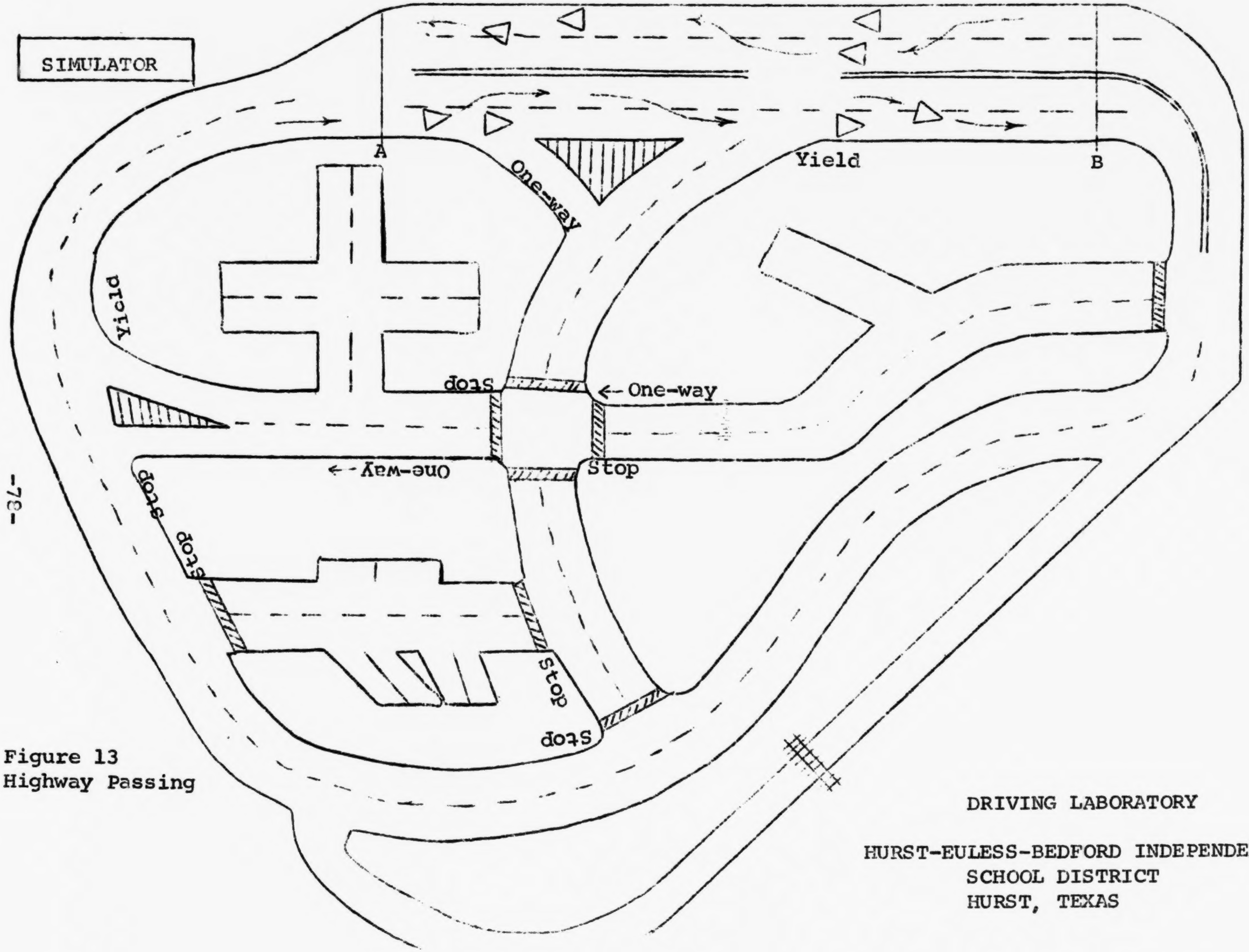
SIMULATOR
A
B
One-way
Yield
Yield
Stop
One-way
Stop
One-way
Stop
Stop
Stop
Stop

Figure 13
Highway Passing

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HURST, TEXAS

RANGE PATTERN #17

EXPRESSWAY DRIVING

This range pattern is concerned with the proper use of acceleration and deceleration lanes on the expressway. Through previous instruction, the students have been exposed to the recommended procedures for entering and exiting the expressway. This pattern provides an opportunity for practical application of procedures learned, on a limited basis. The speed of the flow of traffic is considerably less here than on the actual expressway. This pattern does not substitute for experience with expressways, it is basically a lead-up to that experience.

A. Preparations
  1. The signs as shown in Figure 14 are sufficient for operation in this range period.
  2. The deceleration and acceleration lanes must be marked or otherwise denoted.

B. Procedures
  1. Cars should be parked as shown in Figure 14 for the beginning of the pattern.
  2. In their respective order, all cars should move in the acceleration lane and enter the appropriate lane of traffic.
  3. All cars should follow in order around the range and enter the deceleration lane, then continue to the acceleration lane and back into the flow of traffic.
  4. At this point all present drivers should have used the acceleration lane twice and the deceleration lane once. The range master should, through specific commands, create a two-way flow of traffic and other situations on the range.
  5. During normal range operations each driver should be directed to use the deceleration and acceleration lanes at least two more times.
  6. When it is time to change drivers, the range master should instruct all drivers to return to the starting area.
  7. The same procedure should be followed with the new drivers.

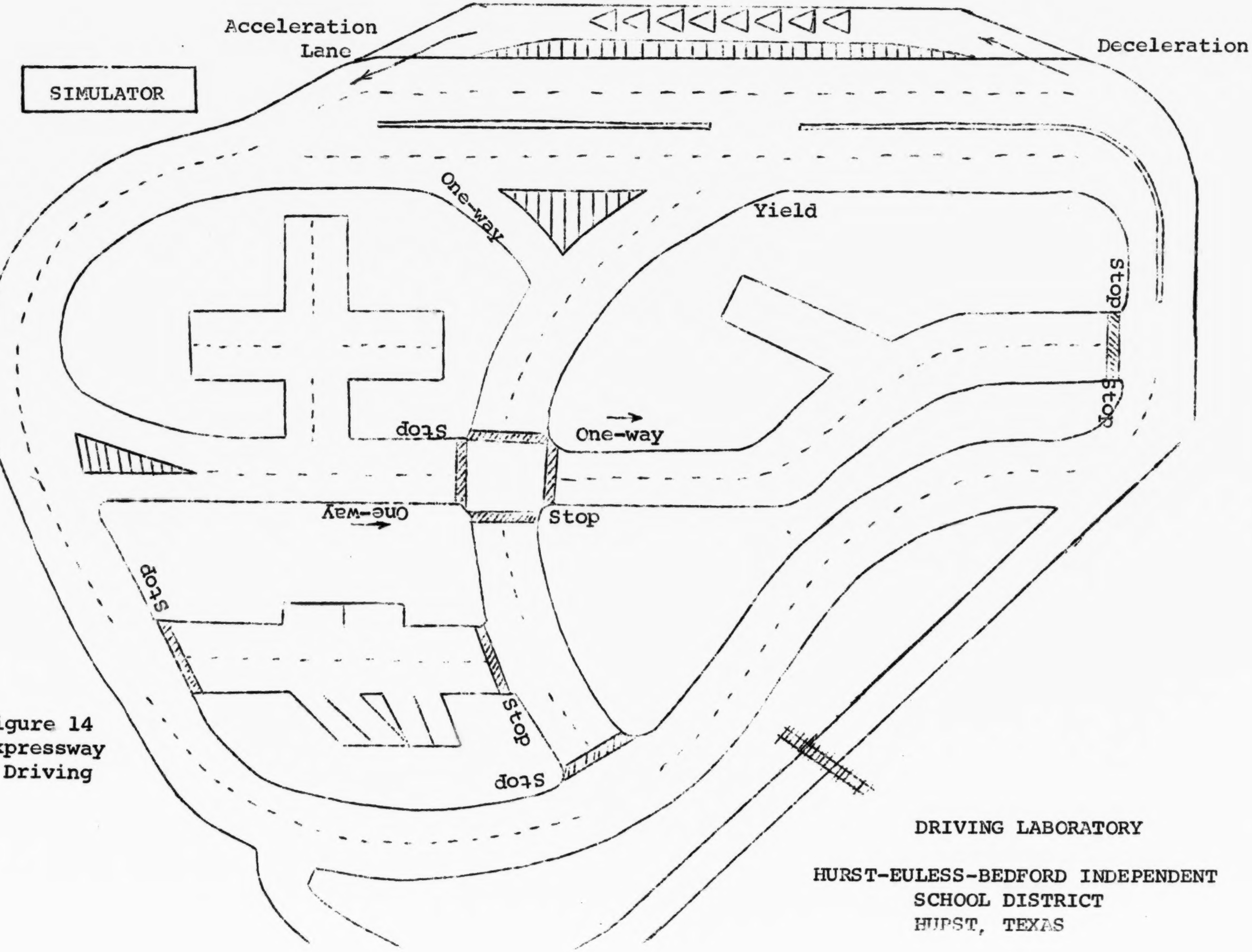
Acceleration Lane
Deceleration
SIMULATOR
One-way
Yield
Stop
Stop
Stop
One-way
One-way
Stop
Stop
Stop
Stop
Stop

Figure 14
Expressway
Driving

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SCHOOL DISTRICT
HURST, TEXAS

RANGE PATTERN #18

EXPRESSWAY DRIVING

This pattern is designed to give the students further practical lead-up experience to expressway driving. Though passing is emphasized in this pattern, the student should get more experience in the proper use of the acceleration and deceleration lanes.

A. Preparations
   1. The traffic signs should be set as shown in Figure 15.
   2. The acceleration and deceleration lanes should be denoted.
   3. Cars should be arranged as shown in Figure 15.
   4. Students should be reminded that passing on the right will be practiced during this range pattern.

B. Procedures
   1. All drivers should start their engines and proceed simultaneously.
   2. The range master should give specific instructions to individual drivers which will provide for the following experiences.
      - passing on the right
      - being passed on the right
      - use of acceleration and deceleration lanes
      - mechanical trouble on the expressway
      - other traffic situations
   3. In regard to the passing maneuver the range master should emphasize:
      - lane selection and changes
      - signals and warnings
      - acceleration and deceleration
      - desirable techniques for checking traffic
      - courtesy at all times
      - thinking ahead to prevent tight situations
   4. When it is time to change drivers, the range master should instruct all drivers to come to a gradual and safe stop. There is no need to return all cars to the starting position in this pattern.

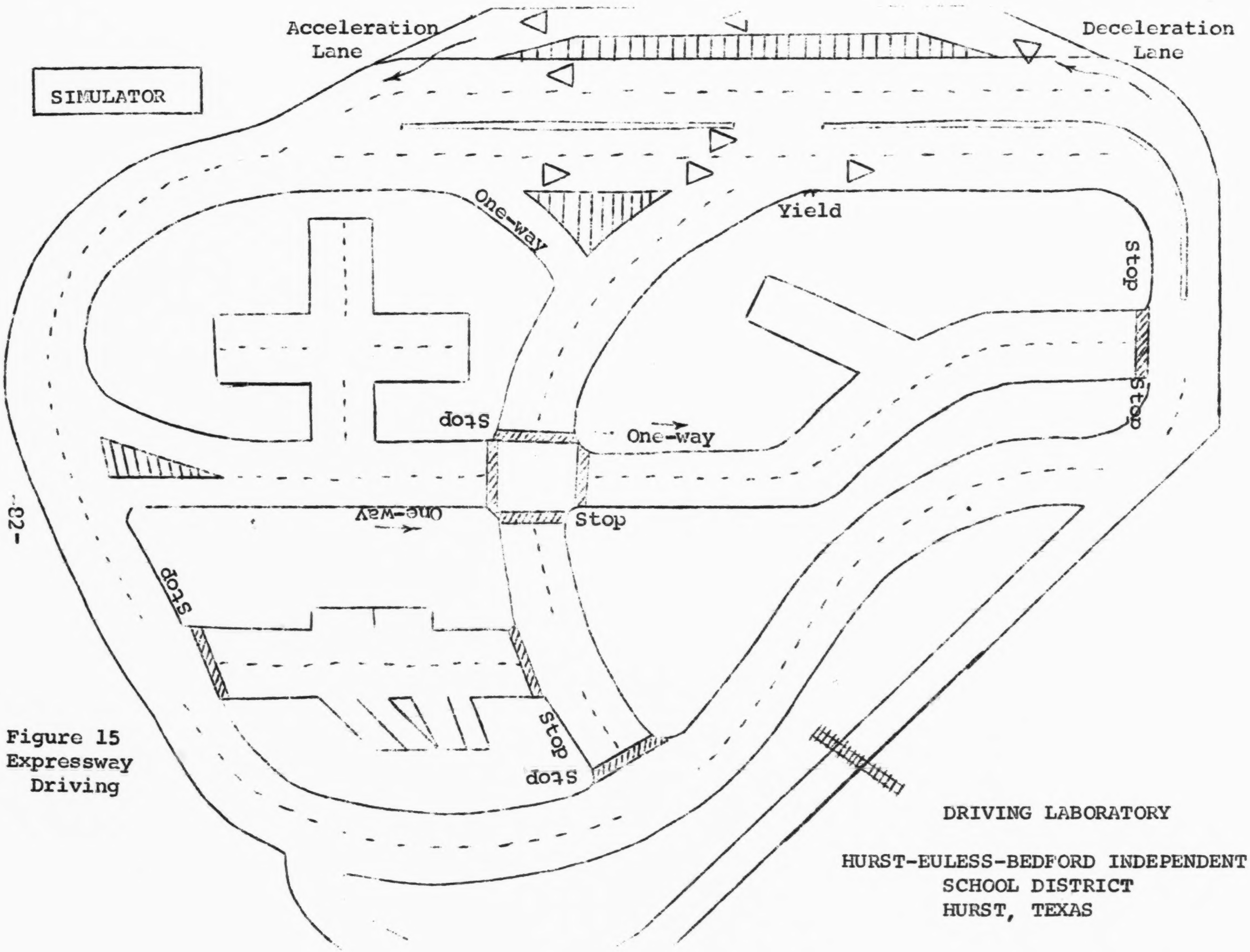
Acceleration Lane
Deceleration Lane
SIMULATOR
One-way
Yield
Stop
Stop
Stop
One-way
One-way
Stop
Stop
Stop
Stop

Figure 15
Expressway
Driving

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RANGE PATTERN #19

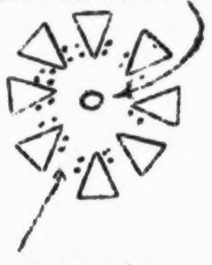
MOTOR VEHICLE SYSTEMS

This range period is devoted to reinforcing learning concerned with the various systems of the motor vehicle. Instruction should be kept as practical as possible so it will be of functional value.

A. Preparations
There will be no driving during this period so no signs will be set on the range. Of particular importance is the arrangement of the cars and students during instruction. Crowding around one automobile has no place in this period. Arrangements should be provided as shown in Figure 16.

B. Procedures
1. With students and cars arranged as specified, the instructor should cover the following systems:
    - steering
    - fuel
    - lubrication
    - cooling
    - electrical
    - braking
    - "Power train"
2. After explaining the systems stated above, the instructor should appoint a boy at each location to change a tire of the car. Students should observe the person changing the tire at their station. This should be conducted step-by-step and not hurried. Safety practices should be stressed at all times.
3. When tires have been changed and equipment put away, the instructor should demonstrate the use of the jumper cable. The reasons for and the advantages of using this equipment should be pointed out.

Figure 16
Motor Vehicle Systems



Instructor

Students standing to the side and toward the front of the cars. No more than two students on the side of any car.

RANGE PATTERN #20

MOTOR VEHICLE EVALUATION

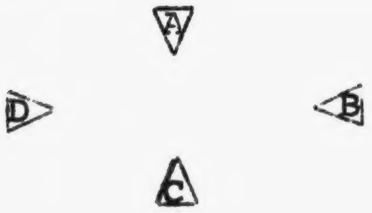
During this range period, the students will gain practical experience in evaluating a used automobile for possible purchasing. The instructor should secure four used cars for use during this range period. The cars will not be driven by anyone during class. A local used car lot may furnish the cars, if not, the instructor must secure four from other sources.

A. Preparations
   1. Cars should be arranged as shown in Figure 17
   2. Copies of Figure 18, Vehicle Check Sheet, should be distributed to students. The use of these sheets should be explained.
   3. Assign a group of six students to each car.

B. Procedures
   1. Instruct students to check the cars according to the check form. There should be only ten minutes allowed for checking each car. Students should not talk to each other about the car in question.
   2. When ten minutes have elapsed, the instructor should command students to rotate to another car. Students at car A should rotate to car B, students at car B would go to car C, and so on, with students at car D going to car A. After each ten minute interval, the rotation should continue until groups are where they started.
   3. Each student should analyze his own check sheet and determine an overall rating for each car. The cars should be rated according to condition, not likes and dislikes.
   4. The check sheets should be collected and the overall rating of cars tallied. The composite rating of each car should be made known to the students.

5. During the rating of the used cars, the engine was not cranked. Though such actions are surely important in evaluating a used car, it would be rather dangerous in this situation. The instructor may desire to develop a method through which the students could hear the engines in action. This would be good but principles of safety should always be upheld.

Figure 17
Motor Vehicle Evaluation



NAME ______________________ PERIOD ________ DATE ______________

VEHICLE CHECK SHEET

	Vehicle Condition											
	A			B			C			D		
Check Points	Good	Fair	Bad	Good	Fair	Bad	Good	Fair	Bad	Good	Fair	Bad
Steering												
Brake Pedal												
Tires												
Oil												
Fuel Tank												
Gauges												
Paint												
Battery												
Electric Wiring												
Transmission												
Fan Belts												
Lights												
Tail Pipe												
Glass												
Motor (Clean.)												
Radiator Hose												
Water												
Differential Lk.												
Carpet												
Jack & Lug Wr.												

Vehicle ------------- A B C D

Rating -------------____ ____ ____ ____

Figure 18

RANGE PATTERN #21

TRAFFIC ACCIDENTS

The instructor should secure the services of a patrolman from the Department of Public Safety or the local police department for this range period. The content of this period involves various aspects of traffic accidents with emphasis on methods of accident investigation.

The visiting speaker should be encouraged to demonstrate the devices used by his department for controlling traffic. Of particular importance and interest here would be the use of radar.

None or very little driving will be done by the students during this period. However, the range is a most appropriate area for such activity, and experiences that are well planned and conducted will be very beneficial and meaningful.

RANGE PATTERN #22

SKILL EXERCISES - I

The skill exercises presented herein afford a means for enhancing student driving skills. The range should be designed as shown in Figure 19.

A. Preparations
   1. Align cars as shown in Figure 19.
   2. Construct "S" by placing rubber stanchions 8 feet apart in the manner shown.

B. Procedures
   1. With students assigned to and seated in cars, instruct all drivers to start their engines.
   2. Have driver of car number one proceed forward keeping his left front wheel on the yellow line. This position should be maintained until the student reaches Point A. Other cars should be instructed to begin when the car ahead reaches the broken part of the yellow line.
   3. Immediately after crossing point A, car number one should turn right into the "S" formation and drive through it, then continue to the waiting line as the arrows indicate in Figure 19.
   4. All drivers should complete this exercise two times.
   5. When all drivers have completed the exercise twice the route should be followed in reverse. With the cars in original starting position, the driver of the rear car should select reverse and back through the exercise just completed.
   6. Each student should experience the backing exercise at least once. More if time permits.
   7. Adequate spacing must be maintained at all times. The range master has that responsibility.

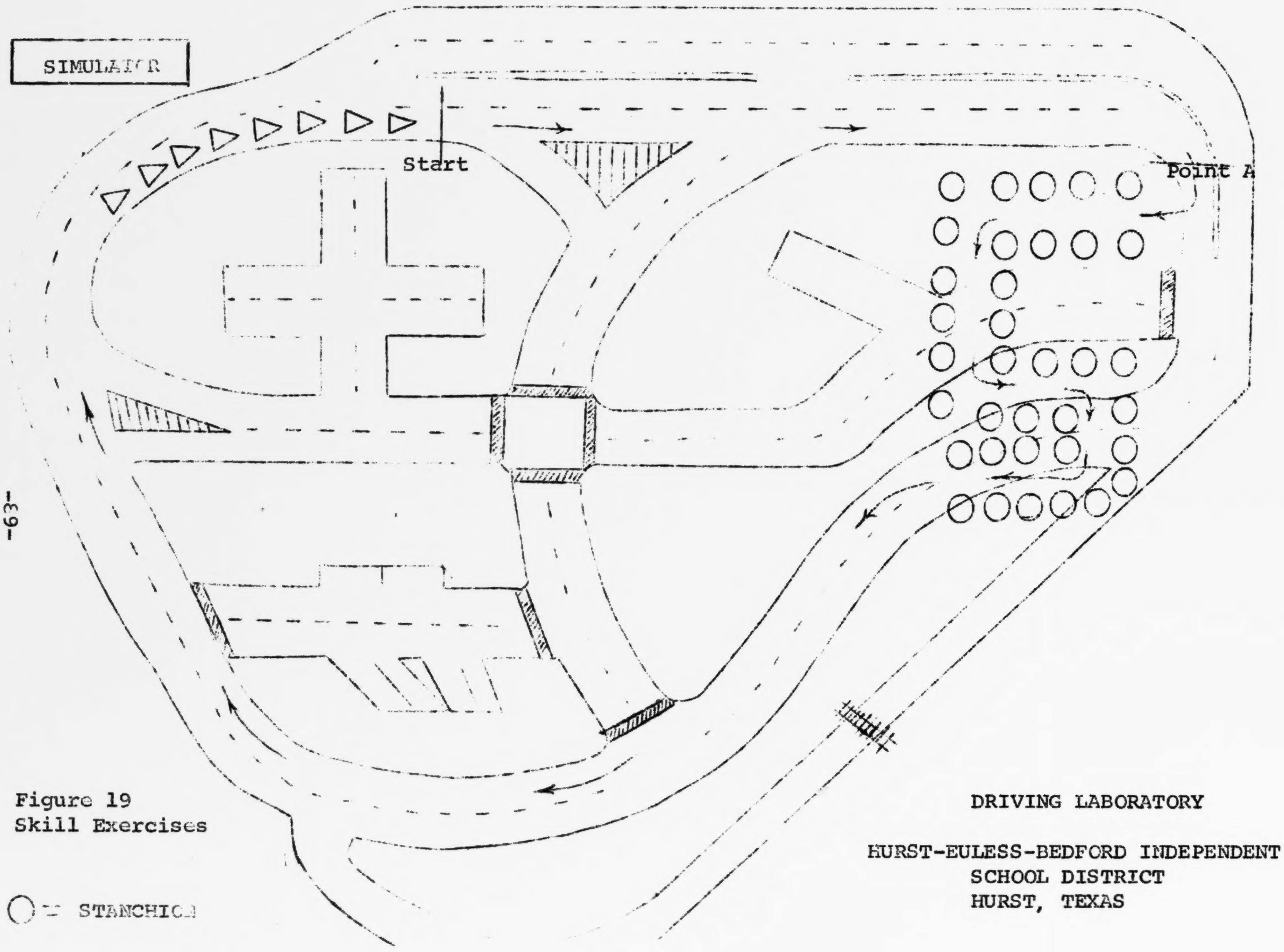

SIMULATOR
Start
Point A

Figure 19
Skill Exercises

○ = STANCHION

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SCHOOL DISTRICT
HURST, TEXAS

RANGE PATTERN #23

SKILL EXERCISES - II

The skill exercises in this pattern are designed to further build skills of automobile control.

A. Preparations
   1. Align cars as shown in Figure 20.
   2. Set rubber stanchions at points A, B, C, and D seven feet apart.

B. Procedures
   1. Instruct all drivers to start their engines and have the lead car proceed, attaining a speed of 10 M.P.H to point A. At that point, the car is to be stopped between the stanchions with the front bumper parallel to, but not over the crosswalk.
   2. As car number one proceeds from point A, the next car should begin. Other cars should follow in like manner.
   3. Car number one proceeds to point B and stops, again between the stanchions and with the front bumper parallel, but not over the crosswalk.
   4. Leaving point B, car number one should now proceed through, not stopping, point C and on to point D. At point D the car should be stopped with the rear bumper in line with and between the stanchions. A speed of 20 M.P.H. should be attained on this stretch.
   5. Car number one should then proceed slowly to the waiting line. Other cars should follow in like manner.
   6. Each driver should complete the entire exercise at least three times.
   7. If stanchions are continually getting knocked over, the instructor may need to station a student in a nearby safe spot to reset the stanchions.

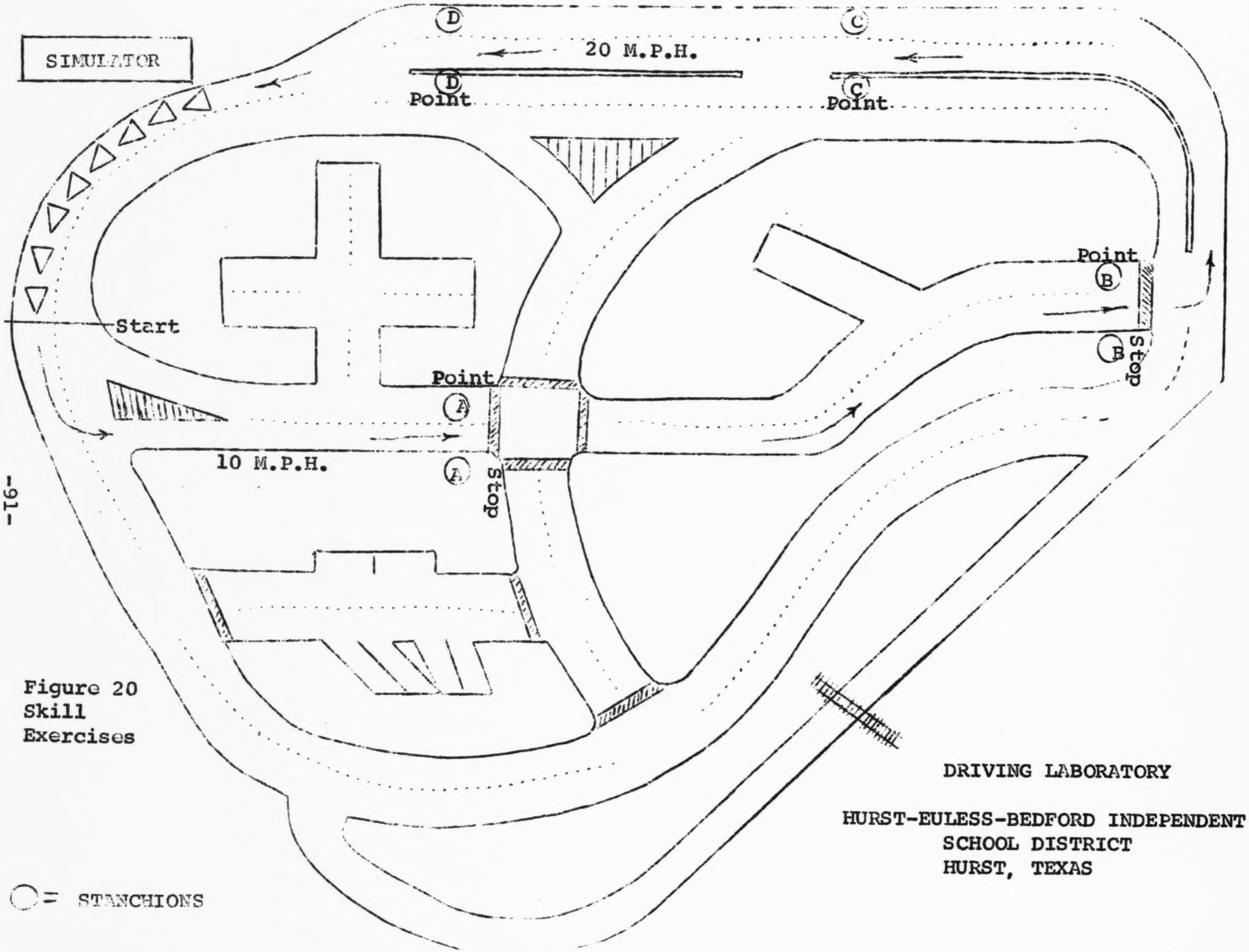
SIMULATOR
D
20 M.P.H.
C
D
Point
C
Point
Point
B
Start
B
Stop
Point
A
10 M.P.H.
A
Stop

Figure 20
Skill
Exercises

DRIVING LABORATORY

HURST-EULESS-BEDFORD INDEPENDENT
SCHOOL DISTRICT
HURST, TEXAS

○ = STANCHIONS

RANGE PATTERN #24

ADVANCED SKILLS AND INDIVIDUAL PRACTICE - [illegible]

This range pattern is designed to introduce students (1) to advanced skills in pulling and backing a boat trailer, and (2) to provide a time for students to concentrate on areas of individual need. The instructor should spend the majority of his time with students learning to pull and back the trailer. Students practicing on individual needs must assume a large degree of responsibility for proper conduct and worthwhile practice. If the instructor has done a good teaching job throughout the course, this should constitute no problem, for this attribute of responsibility is one we stress in driver education.

A. Preparations
1. The range should be designed as shown in Figure 21.
2. Two trailers should be positioned on the range but not hitched to the cars.
3. Eight students should be assigned to the trailer area at a time. Two cars should be parked at the parallel parking station. The other 16 students should be assigned in groups of 4 to each of the other 4 cars.

B. Procedures - Pulling and backing trailer
1. The instructor should briefly discuss the various aspects of pulling and backing a trailer with the group of 8 students.
2. The trailers should be hitched and the lights connected by students, while other students observe.
3. The instructor should complete the driving exercise as shown in Figure 21 while the students observe.
4. Two students should be assigned to each car to complete the exercise.
5. Backing the trailer should be attempted only in the designated area.

C. Procedures - Individual practice

No definite pattern can be specified here because the individual needs are not known. However, the instructor should stress and promote meaningful practice.

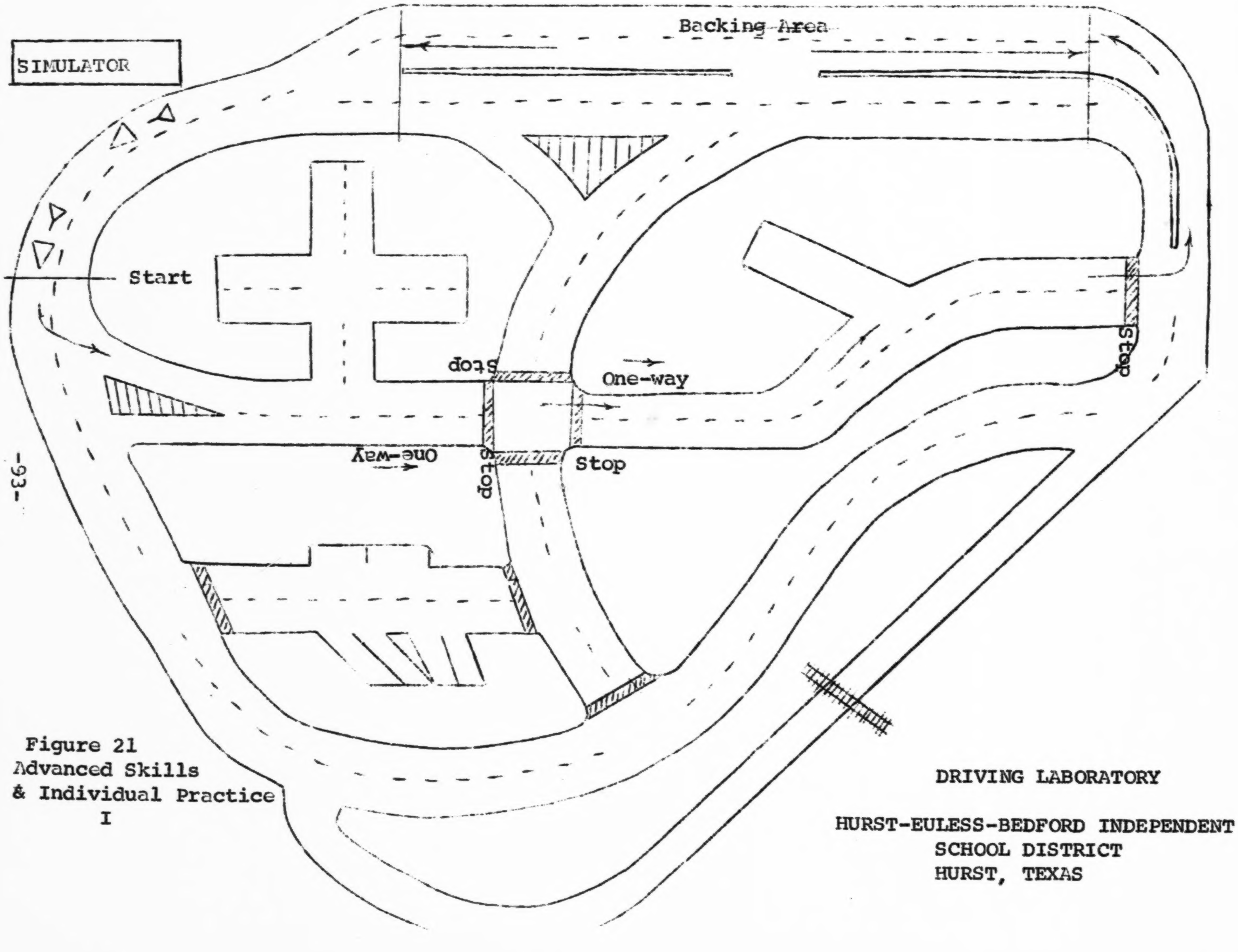
SIMULATOR
Backing Area
Start
Stop
One-way
Stop
Stop
One-way
Stop
Stop

Figure 21
Advanced Skills
& Individual Practice
I

DRIVING LABORATORY

HURST-EULESS-BEDFORD INDEPENDENT
SCHOOL DISTRICT
HURST, TEXAS

RANGE PATTERN #25

ADVANCED SKILLS AND INDIVIDUAL PRACTICE - II

This range pattern is very similar to Pattern 24. In general the same groupings and other arrangements should be utilized. The trailer backing exercise as presented here is more difficult than the first.

A. Preparations
   1. The signs and cars should be arranged as shown in Figure 22.
   2. Trailers should be positioned as shown, unhitched.

B. Procedures - Trailer pulling and backing
   1. The trailer should be hitched.
   2. With two students in each car, the instructor should command driver of car number one to start his engine and proceed as indicated in Figure 22.
   3. When driver number one reaches point A, he should stop gradually, select reverse gear and back the trailer inside the garage.
   4. As driver number one begins to pull out of the garage, the driver of car number two should start his engine and proceed.
   5. The driver of car number one should follow the designated path, completing the exercise at the point from which he started.
   6. Other students should be rotated to the driving position after one or two trails have been completed.

C. Procedures - Individual practice
As was stated in Range Pattern #24, there can be no specific pattern set here as the individual needs are unknown. The instructor and student should plan jointly for exercises which will meet the individual's needs.

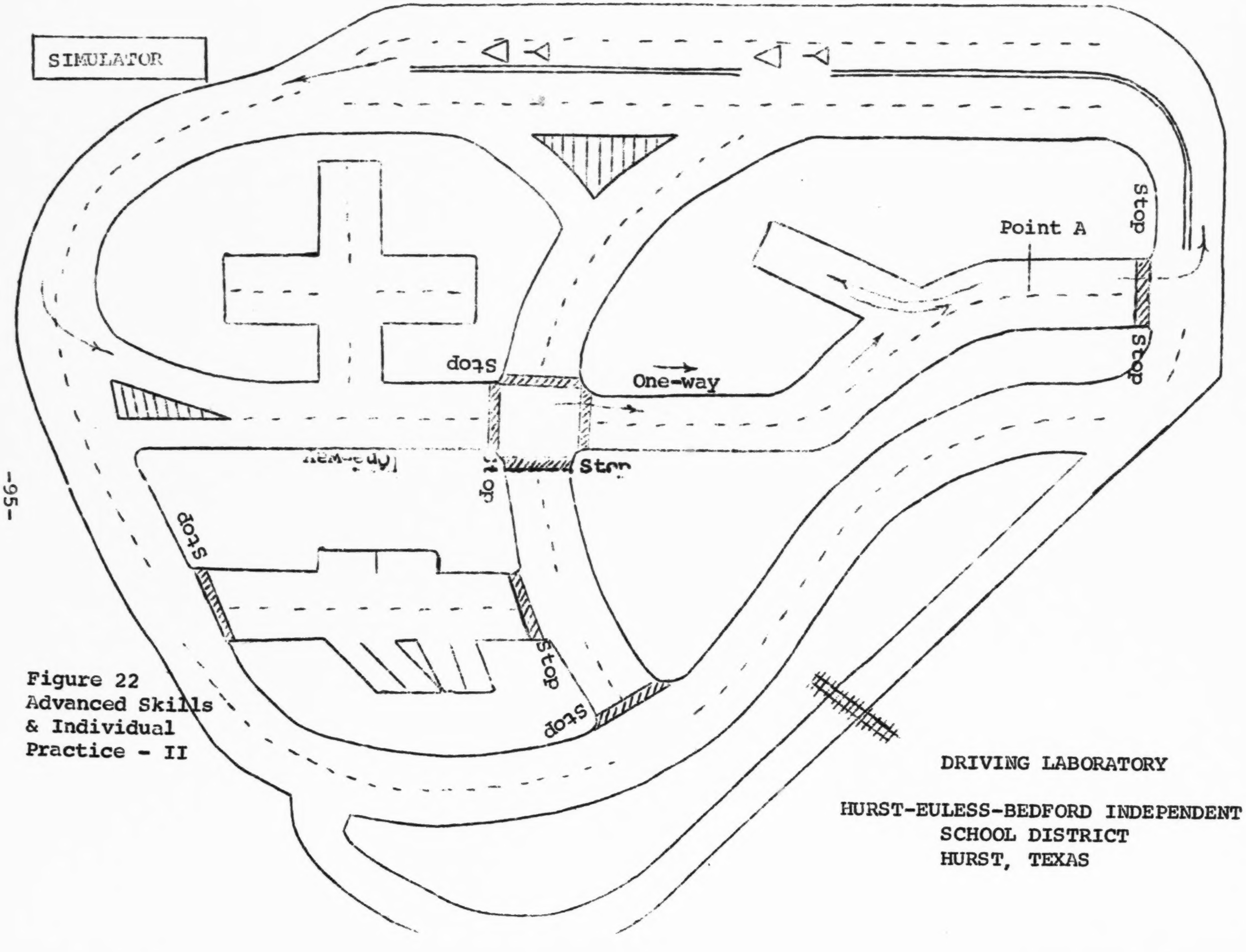
SIMULATOR
Stop
Point A
Stop
Stop
One-way
Stop
One-way
Stop
Stop
Stop
Stop
Stop
DRIVING LABORATORY
HURST-EULESS-BEDFORD INDEPENDENT
SCHOOL DISTRICT
HURST, TEXAS

Figure 22
Advanced Skills
& Individual
Practice - II

SECTION IV - INSTRUCTION CONTENT FOR IN-CAR PUBLIC PRACTICE PHASE

IV - In-Car Public Practice

This phase of the program is conducted during out-of-school hours. Students are scheduled to drive six times, with twenty minutes of driving and forty minutes of observation at each time. The driving schedule is designed to parallel, as closely as possible, instruction in the other three phases of the program.

Students should experience the following traffic environments in the public practice phase:

Driving Time	Environment
1	City driving with light traffic
2	Rural driving with light traffic
3	City driving with heavy traffic
4	Rural driving with heavy traffic
5	Expressway driving - cruising with some open country exiting and entering
6	Expressway driving within the city, with concentration on exiting and entering at various types of interchanges.